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**CASE STUDIES**

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**AcupunctureReliefProject**



Since 2008, Acupuncture Relief Project volunteers have provided over 150,000 primary care visits in rural Nepal. Volunteers participating in our **Third World Medicine Immersion Program** work 6 days a week, not only providing care to patients, but also participating in over 40 hours of continuing education, focusing on improving their skills in case evaluation, treatment planning and patient progression. Upon program completion, each practitioner presents a case study for peer review. These case studies help us analyze the efficacy of our clinic efforts and contribute to a body of evidence that supports our overall project model.

In partnership with **Suswasthya Nepal** (Good Health Nepal), the District Health Office of Makawanpur and the Social Welfare Council of Nepal, we offer this extract of clinical case studies for the analysis and benefit of all physicians and professionals interested in integrated rural healthcare. *Patient photos contained herein are used by express permission of the patient.*

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## CASE STUDY: Typhoid Fever-Induced Paralysis

Andrew Schlabach MAcOM EAMP

### OVERVIEW

32-year-old female presents with left-sided paralysis of upper and lower limbs. At age 12, the patient suffered from a fever due to Typhoid that caused convulsions and coma. After a 20-year history of paralysis, this patient recovered most of her upper limb function and some lower limb function with acupuncture treatment.

### SUBJECTIVE

Patient presents with left-sided paralysis of the upper and lower limbs. She has no pain in the effected limbs, but reports numbness and tingling in the fingers and toes of the effected side. This condition started at age 12 after suffering a high fever, due to Typhoid, which caused convulsions and a 5-day coma. She was treated at the local hospital for Typhoid, but has received no treatment for the paralysis. Patient also reports right-sided knee pain, likely due to poor structural alignment and asymmetrical walking posture. Patient reports persistent low energy, sadness and is easily moved to tears. Patient has 3 children and works as a farmer. Menstruation is regular at about 30 days with scanty flow of pale color for 2-3 days. No menstrual pain or PMS symptoms.

### OBJECTIVE

Patient appears to be in good health for age and environment, but has a slow affect and appears somewhat mentally diminished. Her demeanor is of a person in her early teens.

The left arm is held closely to the chest and the fingers of the left hand are tightly contracted. The fingers can be passively extended with little force, but they return to a contracted condition immediately upon release. The patient can move the shoulder normally, but cannot actively flex or extend the elbow. The hand lacks active response. All joints can be passively moved through all ROM without pain or difficulties. Sharp/dull test on the fingertips shows no objective numbness. DTR on bicep and tricep tendons is normal. DTR on brachioradialis is unresponsive.

The left leg is normal in size and coloration. The left foot is inverted at rest and requires some force to passively evert. Hip flexion and extension have normal ROM and are well coordinated. Muscle strength is similar to the well side. Leg flexion and extension has normal AROM but are poorly coordinated, taking about 15 seconds of concentrated effort to complete the motion. Muscle strength is about 20% of the well side. Patient does not have any active control of the left foot. DTR on patellar tendon and hamstring is sluggish and weak. DTR on the calcaneal tendon is unresponsive. Sharp/dull test of the toes shows no objective numbness.

Pulses are deep and weak and tongue is pale and deeply scalloped.

### ASSESSMENT

DX: Motor paralysis of several major muscle groups in the upper and lower limbs likely due to febrile damage to the central nervous system

TCM DX: Wei syndrome due to qi and blood deficiency; Obstruction of the channels and meridians

PROGNOSIS: Due to the fact that this condition has been left untreated for 20 years, it is unlikely to expect significant response.

### INITIAL PLAN

Treat with acupuncture 3 times per week for 10 treatments before reassessing. Focus on the Yang Ming to stimulate qi and blood. Make heavy use of electro-acupuncture crossing multiple joints, especially concentrating on anterior and lateral compartments of the leg and flexor/extensor complexes of the forearm. Internally, use Dang Gui San 4g TID to tonify and move blood.

Typical treatment: Left: ST36 electro to LR3, GB34 electro to GB41, LI10 electro to LI4, HT3 (distal) electro to HT8, Ba Xie (with heavy stimulation), Ba Feng (with heavy stimulation); Right: ST36, SP6, KI7, HT7, DU 20, 24

Alternative treatment: Pi Ci needling of hand and foot Yang Ming channels, scalp motor sensory (leg, foot and arm zones x3) on well side with electro-stimulation

### OUTCOME

After 10 treatments, the patient reported no change in condition. The patient was informed that due to the long-term nature of the condition and the lack of response to treatment, it was unlikely that acupuncture treatment would be beneficial. The patient opted to continue treatment, but after 18 treatments she still reported "no change." At this time, the patient was encouraged to discontinue treatment. The patient immediately broke into tears stating that she wanted to continue treatment because when she started, she was unable to carry the water bucket. Now, she could. Before she started treatment, she could not walk to the clinic. Now, she could. This was a major revelation of change in condition, which brought to our attention the concept that culturally, "no change" often means "I'm not cured." After a more thorough objective examination, it was observed that the patient now had weak, uncoordinated active movement of the fingers. She could also actively evert the foot. After this discovery, the patient was treated every other day for 4 weeks, during which time she made rapid improvement. Eventually, she was given exercises to teach both the well and ill hands how to isolate individual finger movements. She was instructed to use her eyes to observe her well hand through a series of individual digital movements before trying to replicate the movements with her ill hand. Progress was slow, but continual. The patient was continuously encouraged to exercise. In every treatment session, the patient was reminded of how far she had progressed. After 48 treatments over 3 months, the patient had full, active dexterity of the left hand even though the left arm remained 10-20% weaker than the right. The left foot did not respond as well and remained 50% weaker than the right. Dexterity of the toes was not recovered. However, the patient could dorsiflex and plantar flex the foot.

## **CONCLUSION**

This patient was nearly released from care due to poor communication, objective observation and subjective reporting. When dealing with paralysis recovery, careful objective observation and measures are imperative as the patient is not always aware of the slow changes that are taking place. Visual exercises, in addition to the acupuncture treatment, significantly accelerated the recovery process. Paralysis patients need constant encouragement as the course of treatment is slow. Often, the condition seems to plateau before new changes take place.

## CASE STUDY: Cervical and Lumbar Spondylosis

Danielle Lombardi MAcOM LAc

### OVERVIEW

70-year-old male presents with severe cervical and lumbar pain, neuropathy of the arms, hands, legs and feet, incontinence of bowels and anal rash. His doctor has advised surgery. After 8 treatments he is able to sustain 40 -50% relief of pain for 4 days.

### SUBJECTIVE

Patient presents with severe lumbar and cervical pain, reporting bilateral heaviness, weakness and tingling sensations in his arms and legs. He reports that the neuropathy is worse in his left arm, but is present in all 10 of his fingers, and brought on by cold water and cold temperatures. The tingling in his right leg is worse than in his left leg. Patient also has incontinence of bowels, occurring 4 to 5 times per day. Bowel movements are urgent, formed and easy to pass, but there is pain due to a rash around his anus. He reports feeling hot inside his body, especially at night. His doctor has advised surgery, but he is hopeful that acupuncture might reduce his pain enough to avoid surgery.

The onset of neck pain was 4 to 5 years ago, and the onset of back pain was 8 to 9 years ago. Patient relates his pain to a history of heavy labor, working as a field digger and brick carrier. For years he carried more than 60 kg on his back, but now he is unable to lift 200 g of weight. The pain came on gradually, but has become severe in the last year.

The limb neuropathy began 14 months ago after being hit from behind by a bus. He landed on his right medial knee, upper thigh, chin, nose, forehead and right anterior shoulder. There were no broken bones, but an MRI which was ordered on 4/13/11 revealed nerve damage. After the accident, he was unable to grasp food properly, count money or hold a glass.

The neuropathy radiates from the neck, down the right arm and into both hands. Patient reports heaviness, weakness and tingling in all fingers, but denies pain in the limbs. He can feel warm and cold, but he reports subjective numbness in both hands.

Patient reports no change in pain or neuropathy with time of day, but cold weather makes it worse and heat makes it better.

The neck and back pain are severe, and the symptoms are constant.

In the right leg, patient reports a cold, tingling sensation from sole to knee, which is most intense between the lateral ankle at GB40 and the lateral leg at GB34.

### OBJECTIVE

Patient appears to be in relatively good health, but severely challenged by the pain in his neck and low back. He is unable to perform AROM and orthopedic tests due to the severity of his pain. He is unable to walk without support from his wife, and exhibits severe pain when standing up or beginning to walk. He also has difficulty balancing when standing up, almost falling over.

Sharp/dull test on the fingertips, arms and toes show no objective



numbness. DTRs on bicep, triceps, brachioradialis, patella, hamstring and Achilles are normal. Grip strength is 50% weaker in left hand than right. Nail bed blanching shows normal circulation in both hands and feet.

Cervical AROM shows full range-of-motion with flexion and lateral flexion, extension and rotation, but with report of severe pain with motion. Cervical compression test increases neck pain and heaviness in arms. Cervical distraction test brings relief to neck pain and heaviness in arms. Upon palpation, there is severe pain and tenderness at left C2-C4 and right and left C6 and C7.

Lumbar flexion AROM is 80 degrees (normal 90) with pain on motion. Extension is 15 degrees (normal 30) with pain on motion. Lateral flexion is 20 degrees (normal 30) with pain. Rotation shows 25 degrees (normal 30) with pain on motion.

There is no radiation of pain with exams.

The muscles along the neck and back present with severe rigidity upon palpation. It is difficult to insert a needle without bending due to tenseness of erector spinae musculature.

Tongue: purple-red body, thin bright pink tip, slightly deviated to the right, transverse cracks and purple sublingual veins.

Patient records include:

April 13, 2011: CERVICAL MRI:

- Cervical spondylosis of C4-C7
- Bulge of disk posterocentral at C3-C4
- C4-C5 (posterocentral protrusion of disk); narrowing of bilateral neural foramina with possible impingement of bilateral existing nerve roots
- Disk osteophyte complex with left posterocentral protrusion of disk C5-C6 causing compression of the cord - bilateral impingement of nerve roots

- Diffuse bulge of disk with left posterocentral protrusion at C6–C7 with indentation of thecal sac and cord – possible impingement of existing nerve roots
- Slight increased signal intensity in the cord at C5–C6 level with myelopathy

#### LUMBAR MRI:

- Lumbar spondylosis
- Right-sided spondylosis at L4 – minimal anterolisthesis of L4 over L5
- Mild bilateral posterolateral bulge of the disk at L1–2, L2–3, L3–4 with mild narrowing of bilateral lateral canals
- L4–L5 disk bulge/posterocentral protrusion – stenosis of bilateral lateral canal and neural foramina
- Bulge of disk with annular tear and posterocentral protrusion at L5–S1 with mild compromise to central and lateral canal – no nerve root impingement
- T2 sagittal image of dorsal spine shows minimal posterocentral bulge of the disk at T8–9, denting the thecal sac

#### ASSESSMENT

DX: Cervical spondylosis of C4–7, with nerve impingement at C5–7 and disk bulges at C4–7; Lumbar spondylosis, with right-sided spondylosis at L4, and disk bulges at L1–5

TCM DX: Bone bi syndrome; qi and blood stagnation of Bladder channel and Governing Vessel at cervical and lumbar regions due to and compounded by history of overwork and trauma; Underlying Kidney yin deficiency creating a malnourishment and deformity of bone, leading to qi and blood stagnation transforming into qi and blood deficiency; Qi deficiency and stagnation in the channels leading to neuropathy in the hands and feet

PROGNOSIS: Due to the physical deformity of the cervical and lumbar spine, complete recovery is unlikely. With continued acupuncture treatment in conjunction with stretching, traction, massage, electro-stimulation and cupping, a decrease in pain and neuropathy is likely. The aim is to avoid or delay surgery for as long as possible with consistent acupuncture and conjunctive therapies.

#### INITIAL PLAN

Patient is treated at the clinic 3 to 4 times per week for 1 month, after which treatment progress will be assessed. Focus on Hua Tou Jia Ji [HTJJ] points in the cervical and lumbar regions to stimulate qi and blood circulation in local areas of degradation, disk bulging and pain. Teach patient stretching and exercises to reduce pain. Nourish Kidney yin, tonify qi and blood, move qi and blood.

Typical treatment: Acupuncture: HTJJ points needled deep at C4–7; HTJJ points at L1–5 needled wide and deep and angled medially, with bilateral electro-stimulation at 5 continuous frequency for 30 minutes; Electro-stimulation from S2 to DU2 bilaterally at 5 continuous frequency for 30 minutes; BL40, KI7, LR3

Cupping: Bilaterally along Bladder channel from cervical to lumbar region x 10

Massage: Tiger Balm or Bai Jie Balm applied with massage and pressure point therapy to neck, shoulders and low back

Traction: Neck and arms with a focus on neck for 10 - 15 minutes and arms for 2 minutes

#### OUTCOME

After 8 treatments, the patient reported 40 – 50 % improvement that lasted for 4 days after treatment. He also reported less pain with bowel movements due to the disappearance of the anal rash, as well as a 50% increase in his bowel control. He reported being able to walk for an hour and a half without trouble, and appeared to be able to sit, stand and walk without the distress that he exhibited in his first several visits to the clinic. Upon palpation, his musculature was also much less rigid than before.

#### CONCLUSION

This patient presented with a difficult case due to severe pain, the pressure of impending surgery and no significant change until treatment 7. This case teaches the importance of having the patience to adhere to the treatment plan. The strategy is now revised to a long-term plan of 3 visits per week for 6 months, after which the need for surgery will be reassessed.

With continued treatment over the next 6 months, the intention is to manage pain, regain balance and agility, reduce the neuropathy and regain bowel continence. Future treatment should be focused on acupuncture with conjunctive therapies: electro-stimulation, cupping, traction, stretching and massage.

## CASE STUDY: Chronic Abdominal Pain

Felicity Woebkenberg MAcOM LAc

### OVERVIEW

31-year-old male presents with chronic abdominal pain. The patient has suffered from abdominal pain for the past 11 years, but has had a worsening of symptoms in the past year. Case analysis after 11 visits over 2 months.

### SUBJECTIVE

Patient presents with pain in the epigastric, umbilical, hypogastric, lumbar and iliac regions. The patient describes the pain as burning and sharp in nature, worse after eating, and migratory in nature. Symptoms have occurred gradually over time (starting 11 years ago), but have increased in severity over the past year. The patient had an endoscopy 5 months ago. The results were negative. The patient states that he has trouble maintaining his weight (most likely due to malabsorption), and in the past has had diarrhea stools as often as 6-7 times per day. Currently, this patient is having 1-2 stools per day, which at times are small in amount and often feel as if they are incomplete (and also described as "goat-like stools"). He denies blood or a tarry appearance to the stool, but states that at times there is some visible mucous. He has abdominal cramping and sensations of nausea without vomiting, prior to bowel movements, that are relieved after defecation. The patient also states that he gets frontal and temporal headaches prior to bowel movements with relief after defecation. The patient describes a bitter taste in the mouth after meals. In the morning, the patient awakes to belching, foul breath, liquid in the mouth and a bitter taste. The patient describes the liquid as watery, slippery and light green to black in color. The patient has also described intermittent low-pitched ear ringing, as well as intermittent itching to the skin with a mild redness and rash. The patient states that all of his symptoms are worse with spicy and greasy foods. The patient feels warm overall. His primary emotion is frustration and anger. He has difficulty resolving conflicts with others and avoids challenging situations. The patient denies any significantly stressful life events during the time that his symptoms progressed over the past year. He has high-pitched tinnitus in both ears. The patient has a family history of an aunt who also had a similar condition with similar symptoms who died at the age of 40.

Typical diet: Dhal and rice, potato's, minimal spicy foods, no alcohol

### OBJECTIVE

The patient appears thin and somewhat malnourished and deficient. His cognition appears to be intact and his speech is age appropriate. He is visibly disturbed by his illness and there is a sense of desperation in his search for a solution. The sclera of his eyes have a red tint and he occasionally has watery and itchy eyes. He has a sty on the superior, left eyelid.

He is extremely reactive and tender to palpation particularly in the left upper and lower quadrants, as well as within the hypochondriac region on the right side just inferior to the 10th rib. The patient winces with pain upon palpation and needle insertion. Upon auscultation, hyperactive bowel tones can be heard in all 4 quadrants. The Liver



and Gallbladder appear to be inflamed and exceptionally tender upon examination. The patient is referred to the health post for lab testing to rule out possible cholelithiasis and hepatitis. Labs drawn include bilirubin total and direct, AST, ALT and amylase. All results within normal range.

Pulse: Wiry/slippery and bounding superficially, deficient at the base

Tongue: Red, no coat (peeling particularly on the left side of the tongue), with red prickles to sides and tip

### ASSESSMENT

DX: Possible chronic parasitic infection, IBS, malabsorption syndrome, H. Pylori-Gastric Ulcer or Crohn's disease

TCM DX: Acute: Damp-heat in the LR/GB overacting on deficient SP/ST (with possible deficiency heat)

Constitution: Spleen Qi deficiency leading to the accumulation of damp.

PROGNOSIS: Due to the length of time that this patient has had this condition, it is likely that this will take a significant amount of time for the gastrointestinal tract to heal.

**INITIAL PLAN**

Treat with acupuncture 2 times per week for 10 treatments and then reassess. Focus on points to tonify the Spleen, move stagnation, and eliminate dampness in the middle jiao. Internal herbal treatments include: Huang Lian Jie Du Tang, Gui Zhi Gan Jiang Tang, Stomach Formula, Er Chen Wan, Zi Sheng Wan and Intestinal Fungus Formula. Warm needle moxa on ST36. Dietary considerations, such as avoiding overly spicy foods, greasy foods and uncooked meat are discussed.

Typical treatment: ST36 (tonify qi and blood), SP6 (tonify qi and blood), ST25 (tonify intestinal function), SP15 (tonify intestinal function), CV6 (tonify SP/ST), CV3 (reduce damp-heat), CV12 (tonify yin organs and ST), LI 10 (tonify), PC6 (tonify SP/ST and reduce nausea), LR13 (reduce and harmonize the SP and LR), LR5 (reduce dampness and heat in the lower jiao), LR3->(angled towards)LR2 (reduce excess fire in the LR), LR14 (reduce excess in the Liver), GB24 (reduce excess in the Liver)

**OUTCOME**

After 11 treatments, the patient failed to experience significant improvement. Further diagnostic testing (including eosinophils, Hgb, Hct, stool evaluation) to evaluate for a possible chronic parasitic infection or gastrointestinal bleeding was ordered. All test results were negative. The patient was asked to bring in a sample of the black/greenish liquid that he has in his mouth in the morning in a sealed container for examination and objective data.

The patient progressed from 6-7 bowel movements per day to 1-2 per day. He became much less needle sensitive as the treatments progressed.

**CONCLUSION AND REVISED PLAN**

Further testing, consistency and continuity of care is necessary to properly evaluate this patient, create an appropriate treatment plan and a healing and trusting relationship. Test with herbs for at least 2-3 weeks, in addition to acupuncture 2-3 times per week for another 10 treatments before reassessing. Continue to provide encouragement and consider possible underlying emotions that may exacerbate the patient's symptoms (when diagnostic testing has ruled out other possible causes).

Discontinue Intestinal Fungus Formula.

Initiate Gallbladder inflammation test: ¼ cup of olive oil by mouth; Monitor for changes in symptoms for the next 24 hours. If the test is positive, refer for ultrasound of Gallbladder.

Consider Jia Wei Xiao Yao Wan 10 pills BID for 2-3 weeks for both excess and deficiency symptomology. Emphasize importance of consistent herbal plan to measure herbal efficacy.





## CASE STUDY: Chronic Headache (Typhoid Fever Sequela)

Stacey Kett MAcOM LAc

### OVERVIEW

43-year-old female presents with a severe headache. 9 months ago, the patient contracted Typhoid fever. During the illness, she had a headache that covered her entire head and a mild fever for 5 days. She has had severe headaches ever since. Acupuncture is providing some relief from the headache, but she needs more consistent treatment. Case analysis after 7 visits over two months.

### SUBJECTIVE

The patient presents with a headache located primarily in the temporal and vertex regions. Light and sound do not trigger the headache. She has sinus pressure that contributes to the pain. Her sense of smell is inhibited by the sinus congestion. She presents with occipital neck pain further aggravating the headache. Her hands and feet are cold and sweaty during the day. She sweats profusely when the pain is severe and at night. Her digestion is normal. Menstruation is regular with 4 days of bleeding, 2 of which are heavy.

Medications: PRAN 10 (Propranolol HCL) - a beta blocker used for hypertension, anxiety and panic; Dephylene 25 (Amitriptyline Hydrochloride) - a tri-cyclic antidepressant; Paracetamol 500 mg (Acetaminophen/Tylenol); Anims - pain reliever

### OBJECTIVE

Patient appears to be in good health for age and environment.

Tongue is dusky and red.

Pulse is deep, thin and rapid.

Blood pressure: 135/109; Heart rate: 110; Follow-up BP measurements: 128/82 and 128/98

The occipital and frontal sinuses are tender upon palpation.

An imaging study CT/MRI was done within the last 6 months and showed no abnormalities in her brain.

### ASSESSMENT

DX: Headache from the sequela of Typhoid fever, sinus blockage, occipital neck pain

TCM DX: Blood stagnation in GB/LV channels, blood deficiency due to the febrile disease, phlegm in the LI and BL channels, qi and blood stagnation in the BL channels

PROGNOSIS: This is difficult to treat due to the fact that the patient lives 2 hours away and is not able to come for consistent treatments. If she is able to come for more regular treatments, the prognosis will be better.

### INITIAL PLAN

Treat 3 times per week for 10 treatments before reassessing. Focus



on building and moving the blood in the channels, clearing the blockage in the sinuses and moving blood and qi in the occipital region. Five day course of Xue Fu Zhu Yu Tang to help move the blood and stop the pain.

Typical treatment: HT8, HT3, SP10, TB5, GB41, GB20, BL10, Bi Tong, BL2, GB8, Tai Yang, Yin Tang, BL7, SP6, ST36, BL60

### OUTCOME

The patient came to the clinic 7 times. She came in 2 sets of treatments. 1 was 3 treatments every other day and the next set was 4 treatments in a row. The treatment sets were 3 weeks apart. She noticed after the first set of treatments that her hands warmed-up and she stopped sweating at night. Her headache was better and she had less sinus congestion and pain. The second set of treatments yielded a reduction in pain and an increased sensation in her hands and wrist.

The severity of her headache decreased by 50% during the treatment plan, showing that she responds well to acupuncture. She was advised to increase the frequency of treatments. However, because she lives far away, she is not able to come as often as would be necessary to significantly affect the pain level.

## **CONCLUSION**

This case is incomplete and more information is needed on several topics. The frequency of the headaches is not understood or charted. Which medications are being used is not clearly understood and were charted on 2 separate days indicating that I may not have all the information. The treatment that she received for the Typhoid fever is not known, nor do we know what her other symptoms were from the Typhoid fever. The course of Typhoid fever can include a dormant period of the pathogen. Therefore, if treatment was not given, she may be a carrier, and the bacteria may present itself at a later date. More information is also needed for a clear TCM diagnosis. Are there other LV/GB signs? Are there true heat signs?

After analysis, it is clear that acupuncture treatment had good results, despite the lack of a full diagnostic work-up. However, a more comprehensive exam is necessary to further progress this case further. The herbal treatments may have been too short-term to properly evaluate its therapeutic benefit.

## CASE STUDY: Chronic Obstructive Pulmonary Disease with Osteoarthritis

Jennifer Rankin RAc

### OVERVIEW

65-year-old female presents with dyspnea and continuous cough. The patient also presents with chronic, severe pain and inflammation of all joints of the hands and feet. With 9 acupuncture treatments and the use of Chinese herbs, the patient experienced a 6% O<sub>2</sub> increase, more than a 50% reduction of pain and a 90% improvement in range-of-motion in her hands.

### SUBJECTIVE

65-year-old female patient presents with chronic dyspnea and continuous cough. The difficult breathing started 4-5 years ago and has become progressively worse. The patient does not live in a high traffic area, but has used an indoor fire to cook for most of her life. She now uses gas. The difficulty she experiences breathing is continuously present with no history of asthma attacks and no history of fever and chills. The patient does not report chest tightness or coughing at night. The dyspnea lessens with rest. Occasionally, cough is accompanied by small amounts of white or red phlegm. The dyspnea is the same with inhalation as with expiration. She reports not being able to walk from the microbus to the clinic (about 150 feet) without severe wheezing. It is hard to take a deep breath and she sometimes feels like she is unable to take in enough air. She also reports waking from difficulty breathing. The condition worsens in the winter, in the afternoon, and when walking or lifting. The patient has a family history of breathing difficulty including both her mother and sister who have had medical intervention concerning their conditions. The patient feels cold and gets common colds easily. She has spontaneous sweating.

The patient reports bilateral pain, inflammation and stiffness of all of the joints of the fingers and the feet including the ankles. The pain started 4 years ago while she was still working in the fields and has since gotten worse. Warmth helps the pain and movement makes it worse. The pain is burning, tingling and "unbearable." There is no accompanying fever. The patient reports good energy and appetite. The pain is severe, worse in the afternoon, and interferes with walking and sitting. She has no family history of pain and inflammation in the joints.

The patient experiences pain in the shoulders and knees and a heavy, dull ache in the low back. The patient no longer does field work and does very little activity. No other medical treatment has been administered for these conditions.

### OBJECTIVE

The patient has difficulty talking due to breathlessness and audible wheezing. When she moves, the wheezing increases. She has a weak and raspy voice with the occasional weak cough. She appears to be in average health for her age and environment. A strong wheeze can be heard through auscultation of her lungs. The first measurement on the oximeter is recorded at 91% O<sub>2</sub>.

The patient is in moderate pain, indicated by her ability to smile, laugh and respond to questions. However, walking and sitting are difficult. All joints of the patient's hands are swollen to 40% larger than normal



\* Photos taken after treatment #5

and her feet and ankles are swollen to 30% larger. Both the hands and feet are hot to touch. No bone deformities are present. The patient has an 80% reduction in the active range-of-motion of all her finger joints and is unable to make a fist. She has a 30% reduction in the active range-of-motion of all the joints of her feet. The passive range-of-motion of her joints was not tested.

Pulses are deep, weak and soggy. Her tongue is pale and swollen.

### ASSESSMENT

DX: COPD and osteoarthritis (pronounced in the joints of the hands, feet, knees and shoulder)

TCM DX: Lung and Kidney qi deficiency with wind-cold-damp bi syndrome in the joints

PROGNOSIS: Using acupuncture and herbal treatment, improvement is expected within 10 treatments. However, due to the severity of the pain, inflammation and breathing difficulty, more significant outcomes are expected over a longer course of treatment.

### INITIAL PLAN

Treat with acupuncture 3 times per week for 10 treatments before reassessing.

Focus on reducing swelling and inflammation (cold-damp bi) first. As swelling is reduced, add treatments to tonify the Lung (wei qi) and Kidney qi.

Typical points: LU1, REN17, LU9, KD3, SP6, LU5, ST36, LI4, UB 3, UB23, as well as local points at sites of swelling and pain

Du Huo Jie Xie Wan (8 TID) for first 2 weeks to reduce swelling and inflammation of the joints; Then switch to Ding Chuan Wan (8 TID) to tonify the Lung and Kidney qi

B complex vitamin with 100mg B1, 100mg B5 and 100mg B6 to assist with wound healing and as anti-inflammatory agent

Counsel the patient about proper ventilation of home if ever cooking with a wood fire and wearing a mask when in polluted or high traffic areas.

### OUTCOME

After 9 treatments the patient reported major changes in her breathing, pain and inflammation. The patient's voice was stronger with less audible wheezing and she could take a deep breath. She no longer had times when she felt like she couldn't take in enough air. She wasn't waking wheezing and she could walk from the microbus to the clinic with a very small amount of wheezing. The patient continued to have a regular cough, however it decreased from being continuous to 2-3 times per day. When phlegm was present it was only white. The pulse oximeter generally read between 95-97% O2 and only occasionally read 92- 93% O2.

The swelling in the patient's hands completely resolved with only minor swelling of the lateral ankles. The hands were no longer hot to touch and the patient reported no feelings of heat in the joints. The pain decreased over 50%. The patient had full active and passive range-of-motion in her feet and had a 90% increase in the active range-of-motion in her hands. She was able to walk and sit without severe pain and make a complete fist.

### CONTINUED TREATMENT

This patient needs continuous, intensive acupuncture and herbal treatment for her lungs and arthritis. Continued monitoring of oxygens saturation rates, lung auscultation and a chest x-ray are objective measures of her progress that would be beneficial. The patient has responded positively to treatment thus far and further improvement is expected.

### CONCLUSION

The effectiveness of acupuncture and herbal medicine for both COPD and arthritic pathologies is clearly outlined here. The importance of regular treatment and the use of objective measures to quantify progress is essential.

## CASE STUDY: Facial Paralysis (Bell's Palsy)

Jennifer Walker MAcOM LAc

### OVERVIEW

35-year-old female presents with left-sided facial twitching and paralysis. After 7 acupuncture treatments, the patient regained over 50% of her facial functioning with 80% of the facial twitching resolved.



### SUBJECTIVE

Patient presents with left-sided facial twitching and paralysis. There is painful twitching with frequent tearing of the left eye. The cheek and mouth also twitch, and feel as if "the face is twisted." She has moderate pain (5/10) with smiling that interferes with sleep, concentration and in social situations, causing her not to want to interact with others. Nothing makes the pain worse. The quality of the pain is sharp. She reports that the twitching is activated when eating or

performing other motions with the mouth. The throat is sore and the patient is having difficulty shouting. Patient reports waking with the condition 15 days prior. She has not received any other treatment or medication for this condition. She walks for about an hour to get to the clinic. There is no prior history of the condition. The patient states that on her side of the bed there is a window with a draft.

### OBJECTIVE

Patient appears to be in good health for her age, cultural background and environment. She has a suppressed demeanor and it is difficult to maintain eye contact with her. She speaks very low and says few words when questioned.

There is no visible facial twitching. Upon cranial nerve exam, cranial nerve v, the trigeminal nerve, shows laxity in the masseter muscle. Cranial nerve vii, the facial nerve, shows difficulty in closing and keeping the left eye closed, pursing lips, baring teeth, flaring the nostril and expanding the cheeks with air while keeping the mouth closed. All sharp/dull sensory tests are negative. All tests are negative for any involvement of the right side of the face.

Pulses are thin and wiry. No visible deviation of the tongue or thick coat.

### ASSESSMENT

DX: Facial paralysis (Bell's palsy)

Restricted or impaired control and functioning found in the cranial nerve exam shows motor impairment of the following muscles: orbicular oculi (closes eyelids), levator labii superioris alaeque nasir + alar part of nasalis (flair nostrils), buccinator + orbicularis oris

(puff out cheeks with air while pursing lips), risorius plus levator labii superioris + depressor labii inferioris (bare teeth). Based on the cranial nerve exam, the facial nerve is predominantly affected, leading to the diagnosis of Bell's palsy.

TCM DX: LR wind rising due to LR blood deficiency

PROGNOSIS: Because the patient is starting treatment in the acute stage, a full recovery is expected.

### INITIAL PLAN

Treat with acupuncture 3-5 times per week for 10 treatments before reassessing. Focus on nourishing and building LR blood and eliminating LR wind. Use needles on the face to stimulate the multiple affected muscles. Internally, use Dang Gui San 1tsp TID to tonify blood.

Typical treatment: Bilateral: ST36, LI4, LI10, LR3, LR8, Yin Tong, GB20; Left: 1 needle threaded from the midline just below the lower lip up to the left corner of the mouth, TW17, SI19, LI19, LI20, GB1, ST3, ST4, ST5, ST6, ST7, CV24, Jia Cheng Jiang; All needles with strong stimulation

### OUTCOME

After 6 treatments, the patient reported 1/3rd improvement in the condition. The facial twitching was reduced and no longer visible after needles were inserted. The left eye closed without any difficulty and there was no longer any tearing of the eye during treatment. The patient reported no longer having a sore throat or difficulty shouting. There was no longer any laxity in the masseter muscle. Cranial nerve testing still showed some difficulty smiling, baring teeth and puffing





After Treatment # 3 (11/21/11)



After Treatment # 6 (12/8/11)

out cheeks with lips pursed. Visually, the patient could perform these tasks at least 50% better than during the first treatment. The patient was able to make eye contact and be much more engaged during treatment.

#### **CONCLUSION**

With continued care, it is possible that this patient can expect to see a complete recovery. Her condition has already responded favorably to acupuncture and herbal treatment. During the last visit, the patient was asked to start coming in for treatment every other day for 2 weeks to determine how much progress can be made during this time. She was also counseled to move her bed to an area of the house where there are fewer windows and no draft. In addition, her herbs will be increased to 2tsp of Dang Gui San TID.

## CASE STUDY: Massage for Chronic Back Pain Associated with Spondylosis of the Spine

Brad Caroll LMT

### OVERVIEW

70-year-old male referred for massage treatments for pain associated with spondylosis of the spine and neuropathy. The patient is simultaneously receiving ongoing acupuncture treatments. At the time of the referral, he had completed 18 acupuncture treatments. The main objective, through the combination of massage and acupuncture, is to manage pain, increasing the patient's quality of life.

### SUBJECTIVE

Patient's chief complaint is of severe pain in the low back and right shoulder. The patient defines severe pain as discomfort that inhibits or prohibits his daily activities, such as walking without help from others. He experiences "tingling" sensations in both hands that radiate posteriorly down both legs to the feet, originating at the lumbar region of the back. The frequency of the overall pain is constant and increases with activity (walking and getting up from bed), but the radiating sensation is intermittent and unpredictable. The onset of the radiating sensation may correlate to the severe levels of pain in the lumbar region of the spine. The intensity of the pain fluctuates daily between severe and mild depending on the amount of activity in which he engages and the treatments he receives. He defines mild pain as a discomfort he recognizes on a daily basis, but doesn't interfere with or prohibit his daily activities. Direct sun exposure alleviates the pain. He reports that the pain interferes with sleep when at a moderate level. The patient defines moderate pain as a discomfort that is constant, distracting and interferes with his daily activities (ie. walking), but doesn't require help from others. The onset of the pain is unknown, but increased after being hit by a car 1 year ago. Pain increases with cold temperatures and with coughing episodes. Patient states that surgery has been recommended, but he is unable to afford it. He expresses his fear of becoming paralyzed from spinal surgery. He experiences depression and at times wishes he were dead because he feels like he can no longer provide for his wife and be useful to his family. He feels stressed and emotional most of the time, especially when his pain levels increase and his ability to be useful to his family decreases. Although he has never received a professional massage treatment before, he uses self-massage with Tiger Balm daily for temporary relief of shoulder and low back pain.



- Tone and speed of voice increases with movements that cause pain
- Tears when answering questions about his pain and his perception of how his condition affects his wife and family
- Muscle spasms on the bilateral wrist flexors, including flexor carpi radialis, flexor carpi ulnaris, palmaris longus, flexor digitorum superficialis and flexor digitorum profundus as well as triceps brachii when lying in the prone position on the table

#### Postural analysis findings:

- Bilateral medial rotation of the shoulders; Mild
- Right shoulder elevated; Mild
- Posterior tilt of the pelvis; Mild
- Genu Varum; Mod

#### Palpation:

- Hypertonicity of the erector spinae group, gluteal region and hamstrings
- Palpatory tenderness on the right supraspinatus, infraspinatus, rhomboid major, minor, biceps tendon, teres minor and major and the anterior, middle and posterior fibers of the deltoid
- Palpatory tenderness with increased pain on origins of bilateral quadratus lumborum, gluteus maximus, gluteus medius and gluteus minimus

#### AROM:

- Lateral flexion, rotation, flexion and extension of the head and neck ( cervical spine) are all within normal limits with minimal discomfort.
- Extension and flexion of the cervical, thoracic and lumbar spine are within normal limits. Moderate pain occurs with flexion of the spine beginning with contraction of the action.
- Rotation and lateral flexion of the spine are all within normal limits with no pain indicated.
- Abduction, adduction, flexion and extension of the arms are below normal limits with pain increasing with extension and abduction.
- Increased pain at the biceps tendon on right shoulder with flexion of the right elbow.

### OBJECTIVE

Visual observations while at the clinic, indicating pain and stress, include the following:

- Walking slowly with assistance from his wife and a walking stick
- Facial expressions associated with pain when walking; Attempting to sit or stand by himself or removing clothing in preparation for a treatment

**PLAN**

Continue Traditional Chinese Medicine treatments 2-3 times per week as recommended by acupuncturist. Massage treatments (approx. 30-40 min. each) at least 2 times per week for 5 weeks to increase relaxation, stress reduction, and decrease overall tension and pressure of the muscles of the posterior spine, shoulders, pelvis and legs. These muscles include, bilaterally, the erector spinae group, supraspinatus, infraspinatus, rhomboid major, rhomboid minor, biceps tendon, biceps brachii, teres minor, teres major, deltoid, quadratus lumborum, gluteus maximus, gluteus medius, gluteus minimus, piriformis, biceps femoris, semitendinosus, semimembranosus, gastrocnemius, peroneus longus and peroneus brevis. Massage treatments include the following techniques and purposes for the muscle groups affiliated, bilaterally, with the posterior spine, posterior shoulders, posterior pelvis, posterior thigh and lower leg:

**Effleurage:** To relax the muscles, stimulate the peripheral nerves, increase lymph and blood flow, remove waste products and begin to stretch the muscle tissues

**Petrissage:** To increase mobility between tissues, stretch the muscle fibers, increase venous and lymphatic return, relax the muscles and aid in waste product removal

**Compression:**

- Hypertonic muscles soften and lengthen.
- Muscles are flushed and interstitial stasis is reduced.
- Released histamines dilate capillaries, increasing cellular nutrition.
- Muscles fire faster with increased amounts of acetylcholine.
- Muscle lesions heal faster with increased collagen production.
- Stretching muscle fibers increases capillarization.
- Fascia is rejuvenated and enlivened.
- Range-of-motion and freedom of movement increase.
- Myofascial pain and secondary autonomic phenomena caused by trigger points are usually eliminated.

**Hot/warm hydro therapy:**

Use of the warm singing bowl technique, warm compress with vapor wrap and passage soft tissue lotion

Heat therapy dilates the blood vessels of the muscles surrounding the lumbar spine. This process increases the flow of oxygen and nutrients to the muscles, helping to heal the damaged tissue.

Heat stimulates the sensory receptors in the skin, which means that by applying heat to the lower back, pain signals transmitted to the brain will decrease, partially relieving discomfort.

Heat application facilitates stretching the soft tissues around the spine, including muscles, connective tissue and adhesions. Consequently, with heat therapy, there will be a decrease in stiffness while improving flexibility and creating an overall feeling of increased comfort.

**Vibration:**

Used to help sedate the patient's nervous system and aid in general,

overall relaxation. Singing bowl vibration on the quadratus lumborum and plantar surfaces of the feet and sacrum

Homework for patient:

- Stretches for flexion of the spine twice daily, morning and bedtime
- Hot water bag each night before sleep
- Continue to use Tiger Balm oil and self-massage, as needed, for pain relief.
- Increase water intake by 1 liter.
- Rest as much as possible

**OUTCOME**

After a total of 10 massage treatments, the patient reported a 15% decrease in overall pain. Patient stated that he consistently experienced a 50-75% reduction of pain symptoms during the first 48 hours after a massage treatment before symptoms gradually returned. Pain increased to severe levels with activity upon the onset of its return after the initial 48 hours. The patient appeared more relaxed when receiving treatment and when in the treatment room. His range-of-motion was the same, but with less pain. He was able to walk by himself without his wife's help. He could sit, stand, remove his clothing and upright himself from a prone position on the massage table without assistance. Tenderness and pain with palpation and touch decreased. He presented with less physiological mannerisms associated with pain. He smiled for the first time during treatment 9. Muscle spasms occurring during the treatments decreased moderately. Hypertonicity of the erector spinae group decreased minimally.

**CONCLUSION**

This patient completed a total of 40 acupuncture and massage therapy treatments over a 3 month period. During this time, he received pain relief, even if only for brief periods after the treatments. Consistently, within 48 hours of each treatment, the patient's pain would return to severe levels, interfering with his daily activities, thereby decreasing his quality of life. Based on the patient's age, severity of the physical condition, emotional health and socio-economic status, it is my opinion that the short-term focus of care should consist of encouragement for improved emotional health to promote a better quality of life. Long-term care for pain with acupuncture and massage is appropriate to provide pain relief, provide hope and contribute to his overall quality of life. With continued treatment, I believe that the patient would benefit from care focused on education of his condition, including the objective and subjective observations, providing pain relief and recommending resources that can support a better quality of life.



## CASE STUDY: Juvenile Rheumatoid Arthritis

Kimberly Shotz WHCNP MN MAcOM

### OVERVIEW

10-year-old female presents with active phase of Juvenile Rheumatoid Arthritis (JRA) as demonstrated by multiple articular bony joint deformities, severely limited range-of-motion in all affected joints, and a history of recurrent episodes of alternating fever, chills and profuse sweating, immediately preceding joint inflammation and swelling. Within the course of 9 acupuncture and moxibustion treatments plus Chinese herbal and vitamin supplementation, the patient noted cessation of recurrent episodes of fever, chills and sweating, decreased heat sensation in joints with active inflammation, and temporary decreases in pain while walking.

### SUBJECTIVE (AS REPORTED BY PATIENT'S FATHER)

The patient was evaluated by allopathic medical physicians at a Kathmandu hospital at least 2 years prior to her first visit to WHC. Blood tests and x-rays (not available for review) indicated rheumatoid arthritis. She was prescribed multiple medications, which she took for 2 weeks. Medications included injections she was advised to receive weekly for 4 weeks. She had 2 injections, which "had no effect." All medications were too expensive to continue. The patient's father refuses to involve allopathic medicine in the current management of the patient's disease, but agreed to update blood tests (CBC, ESR).

Patient presents with hot, swollen ankles and knees, making it too difficult for her to attend school.

O – 6 years ago with 3-4 days of tidal fever, cough and "cold"

F – Fevers come every week to 3-4 months and last about 4 days. They are preceded by a sensation of inflamed tonsils and are followed by joint swelling and a sensation of heat in the affected joints, which are warm to touch, but with or without redness and pain.

Q – Affected joints vary with each episode, but are typically bilateral.

Without fever, most joints feel cold and stiff inside.

P – Cold weather and prolonged immobility, such as bus rides, seem to worsen her overall joint stiffness. Swelling increases with mobile activities, such as walking. Wearing warm stockings helps reduce stiffness.

S – Patient reports significant difficulty with ambulation due to both restricted ROM and occasionally severe pain.

T – The duration of active, inflammatory phases is unclear, but seems variable.

### OBJECTIVE

Patient's affect is flat and timid, with infrequent eye contact. She does not speak and looks to her father for answers to physician questions. She nods occasionally. She ambulates slowly with rigid, erect posture, arms extended and inanimate at side, with somewhat of a shuffle and notably reduced knee and foot flexion.

Her tongue is purple red with a crimson tip and thin white coat at



back. She has erythematous sublingual sores (ulcers). Her pulses are thin and rapid.

She displays no observable expressions of pain during palpation of affected joints, but quietly gasps and retracts (i.e. guards) her limbs with attempts to move a joint beyond its passive ROM.

Elbows: Lateral epicondyles are enlarged, rounded (2X normal), bony-hard, cool, without erythema or edema and non-tender; Limited extension to ~145 degrees

Wrists: Mildly enlarged (<2X), bony landmarks obscured to palpation, non-tender; No active or passive extension; Active/passive flexion ~20 degrees; Inversion/eversion <10 degrees with mild crepitus of right wrist

Hands/Fingers: Mild bony enlargement of proximal and medial interphalangeal joints bilaterally, cool; Patient unable to flex fingers into fist

Ankles: Swollen, red, hot

Knees: Soft swelling over medial and lateral femoral and tibial condyles (3X normal)

#### Active and Passive Range-of-Motion:

Neck: Extension ~0 degrees, flexion ~10-20 degrees, lateral rotation ~10-20 degrees, lateral flexion ~30 degrees to pain

Wrists: Extension ~0 degrees, flexion ~45 degrees, inversion/eversion ~10 degrees

Fingers: DIP/MIP flexion <45 degrees, first and second MCP flexion ~20 degrees

Knees: Extension ~75-80 degrees

Ankles: Dorsiflexion ~0 degrees, non-painful crepitus near talus with inversion 5-10 degrees of right ankle, eversion ~5 degrees, plantar flexion <45 degrees

Laboratory (2 years ago)

Hemoglobin (HGB): 8 (very low)

Neutrophils: Elevated



White Blood Cell Count (WBC): 14 (elevated)

Erythrocyte sedimentation rate (ESR): 30-50 (elevated)

Laboratory (11/24/11)

HGB: 9.5 (low, improved)

Neutrophils: 81 (elevated)

WBC: 11 (mildly elevated, improved)

ESR: 90 (significantly elevated, active phase)

Oral temperatures (in sequence of visits): 94.4, 97.1, 95.5 (variable, low)

Weight: 22kg

#### Assessment

DX: Polyarticular arthritis, systemic juvenile arthritis with osteopenia (Still's disease)

TCM DX: Shaoyang or blood level heat/heat bi syndrome; bony bi/wind-cold-damp with latent damp-heat toxin

#### PLAN

Treatment principles: Warm and open the channels and collaterals, move qi and blood, dispel cold, damp, wind, nourish blood, tonify qi, blood and 5 zang organs (constitution). Induce prolonged remission phase of JRA, prevent recurrence of active phase of disease by strengthening constitution and promoting optimal immune function. Treatments consist of combinations of in/out and sustained needle acupuncture, indirect moxibustion and refilling herbal prescriptions and dietary supplements.

Dietary advice: Avoid night shade vegetable family, animal fats, greasy/fried foods, sugar and spicy foods. Increase oral hydration of warm fluids and incorporate cinnamon and turmeric into meals.

Dietary supplements: Calcium 500mg, vitamin D3 500 IU per day, B-complex 1 tab once daily, ibuprofen 20-40mg/kg/day in 3-4 divided doses (not to exceed 880 mg in any 24-hour period) for no more than 5-7 days without clinic evaluation (Liver and renal function labs need to be updated)

Herbs: Feng Shi Ding 2-3 pills BID

Acupuncture: 3 times per week

The following acu-points are used: SP9, LI11, LI10 TB5, GB34, BL11, LR3, LI4, TB3, LI5, SI7; In/out needling: DU14, ST34, SP9, ST36, BAXIE, ST36, KD3

Limit to 8-9 points per treatment.

Auricular acupressure seeds (1 visit): Shenmen, Kidney, Liver, Knee applied bilaterally to leave in place for 3-4 days

Indirect Moxibustion: ST36, elbows, wrists, dorsal hand/MCPs, ankles

## OUTCOME

Patient noted reduction in both pain and difficulty with ambulation immediately following treatments. The father reported cessation of alternating fever, chills and profuse sweating episodes as well as an improvement in her energy. The duration of pain reduction benefit was limited to 2-3 days. Patient's shen appeared brighter and showed increased interest and attentiveness during her treatments. She was able to actively extend her legs to 180 degrees and dorsiflex her ankles to ~5 degrees. The first and second MCP joints had 30 degrees flexion. After treatment 5, ankles no longer felt hot and her knees were warm without erythema.

At her 6th visit, the formula was changed to Xuan Bi Tang Wan 3 tablets TID. A stronger blood/qi/KD nourishing herb was being considered for her 9th visit, given that the joint swelling and inflammation was waning. Liu Wei Di Huang Wan was chosen and dispensed to patient at 9th visit, 8 TID.

Because it took 6 hours of public transportation to get to and from the clinic (>18 hours of missed work per week for patient's father), this schedule was not feasible. Patient received treatments every 3-7 days for 8 treatments.

## CONCLUSION

This young patient has a severely disabling, progressive disease and lacks resources required for allopathic management regimens known to induce and prolong remission phase and reduce joint destruction associated with Juvenile Rheumatoid Arthritis (JRA). Each day that severe, active-phase joint inflammation continues, indicates potentially permanent joint damage, reduced mobility and reduced quality of life for patients with JRA.

The patient's father accompanied her to most clinic appointments and provided a limited and inconsistent history of her disease condition, possibly indicating cultural-conceptual and/or practitioner-patient communication challenges. This definitely represented a barrier to optimal assessment of her condition. It was clear from his account of her history that he did not understand the disease process of JRA, its management, or the implications of ineffective management.

The long distance between home and clinic resulted in excessive time away from work for her father, which severely limited treatment frequency and potential efficacy. This patient was unable to maintain the optimal 3-4 times weekly treatment schedule, yet still noted both subjective and objective improvements during the course of her 9 visits over 6 weeks: increased joint range-of-motion, reduced joint inflammation, cessation of systemic inflammatory symptoms, improved constitutional energy and spirit.

It is expected this patient would benefit from incorporating massage



and physical therapy into her treatment regimen. Some of her reduced joint mobility seems to be from muscular contraction due to the combination of prolonged guarding of joints and limbs and reduced mobility. A more aggressive treatment plan using a greater number of acupoints with longer needle retention, plum blossom, jing-well acupoint bleeding, scalp acupuncture and/or electro-acupuncture may enhance treatment efficacy and may be employed as patient comfort permits.

## CASE STUDY: Ganglion Cyst

Seven Crow MAcOM LAC

### OVERVIEW

11-year-old female presents with large lump over left radial artery at radial styloid process, causing pain to the local area. She had minor surgery to remove a gelatinous substance from within the cyst and was informed by the doctor that it will keep growing back. After 9 acupuncture treatments, including internal and external herbal medicines, the cysts presented with 70% reduction in size.

### SUBJECTIVE

Patient presents with large lump over radial side of left wrist. She reports (with the help of her mother) that it started to grow a year and a half ago and refers to it as a "bone growth." She saw a doctor to inquire about removing the lump and was informed that it was not possible due to the innervation of the cyst.

There is no change to the pain or growth with temperature. Some stimulation via massage has been helpful to reduce pain and swelling. Patient states she visited a doctor to have it surgically removed and was prepped for the procedure when the doctor opted not to do a complete removal due to innervation of the cyst by the radial artery. The doctor did remove a gelatinous substance from the top layer of the cyst, but the mass grew back. The size of the cyst at first visit to this clinic on January 17, 2012 has been the same for 1 year.

At age 2, she contracted pneumonia. Since then, she catches colds easily, 3-4 times per year, each lasting up to 2 weeks. These present with a runny nose with clear mucus, cough with some phlegm, body aches, headaches, loss of appetite and slightly looser stools with frequent urination. Since beginning treatment, she has had no common colds.

### OBJECTIVE

Patient has a thin body, but appears energetic, smiling, talkative and open to conversation with full eye contact. She knows some English and answers the questions directly when she is able. Upon palpation, the skin is warm, tougher than the surrounding skin, and exhibits a hard central mass that is moveable. The cyst sits half an inch off the skin and about half an inch wide, on the crease of the left wrist, with localized sharp pain when palpated deeply, which she expresses through guarded behavior. There is also some additional swelling and redness at the height of the mass, but no lack of range-of-movement in the joint.

Tongue: Pink body with a red tip, white tongue coat, thicker at root

Pulse: Thin, slippery overall with deficiency in the right cun position, and deep in both chi positions

Patient records include:

X-ray of left wrist, July 20, 2010 (1 ½ years prior to current treatments): No abnormal bone growth is shown

Ultrasound of left wrist, July 4, 2010 (1 ½ years prior to current



treatment): Reveals cysts growing on either side of radial artery, with possible nerve innervation

Approximately 1.7 x 0.9 cm of cystic lesion is noted in the volar-radial aspect of the wrist, with a smaller cyst measuring 0.6 x 0.3 cm rooted deeper. The left radial artery is intimately related to area of the posterior wall of the superficial cyst. It shows normal color and doppler flow in the radial artery.

Hospital visit, February 20, 2011 – check-up (1 year prior to current treatment): Swelling in left wrist for past 10 months, gradually increasing in size. Positive for pain, but no trauma indicated. At time of check-up, 4 x 3 cm<sup>2</sup> in the wrist at the ventral surface and lateral margin

### ASSESSMENT

DX: 2 ganglion cysts growing around the left radial artery, with some innervation by the surrounding nerves of the local area.



TCM DX: Mass due to phlegm accumulation in the channels and collaterals of the Lung with some qi and blood stagnation present as indicated by the fluid filled node over TaiYuan (LU9) and slight compression of the artery. Condition is due to constitutional wei qi and Lung qi vacuity, with Spleen qi vacuity, allowing for retained pathogens to harbor within.

PROGNOSIS: Due to placement of the cyst, it may not be possible to completely resolve the node. It is likely that herbal treatments, acupuncture and self-massage will reduce the size of the cyst, but it may not resolve completely.

#### PLAN

Patient to be treated at the satellite clinic 2 times per week for 10 weeks and reassess progress after a second ultrasound. The focus will be on constitutional points, surrounding the area with needles, herbal treatments internally and externally, along with self-massage and qi gong. Aim is to reduce pain and size of the cyst to avoid surgery.

#### TYPICAL TREATMENT

Acupuncture: Surround the dragon technique with 5-7 needles includes LU7 (Lie Que), LU9 (Tau Yuan) and LI5 (Yang Xi) all threaded towards the center of the cyst; ST36 (Zu San Li), SP6 (San Yin Jiao), SP9 (Yin Ling Quan) and KD3 (Tai Xi) to boost constitutional deficiencies.

Moxa: Indirect pole moxa for short duration to reduce pain and swelling in the area. In the future, try small rice grain moxa directly on the swelling.

Massage: Light yin tuina massage mixed with qi gong to the area to increase qi and blood flow.

Herbal Medicine: San Zhong Kui Jian Tang (Hai Zao, Kun Bu, Jie Geng, San Leng, E Zhu, Bai Shao, Gang Gui Wei, Hunag Qin, Huang Lian, Long Dan, Lian Qiao, Zhi Mu, Huang Bo, Tian Huan Fen, Chai Hu, Shang Ma, Ge Gen, Gan Cao) drains pus, reduces swelling, abscesses and hard nodes; 1 capsule TID internally and 1 capsule mixed with oil to make paste to apply externally over area morning and night. Once the cyst has shrunk by 80%, Yu Ping Feng San (Huang Qi, Bai Zhu, Fang Feng) will replace San Zhong Kui Jian Tang internally for the

constitutional deficiencies.

Lancet: At the 3rd treatment, the cyst was punctured with a lancet. A small amount of gelatinous fluid and blood was extracted.

#### OUTCOME

After 9 treatments, the cyst reduced in height and redness by 70% from initial inspection. The swelling spread in width, but reduced in height. There was no longer a hard mass underneath and no redness to area. Palpation revealed little to no pain, and no guarding to area.

#### CONCLUSION

Continue care for 4-6 more treatments. Follow up with ultrasound for further assessment. Prognosis is good, revealing no current need for surgery. However, it is unlikely the node will stay dormant without continued care, and attention to underlying constitutional deficiencies.

## CASE STUDY: Rheumatoid Arthritis

Elissa Chapman BAppSc (TCM)

### OVERVIEW

35-year-old female presents with multiple bilateral joint pain beginning 18 months previously and had received a diagnosis of rheumatoid arthritis at the Arthritis & Rheumatic Diseases Treatment Centre in Nepal. After 10 treatments of acupuncture, in conjunction with herbal medicine, she experienced a significant reduction in joint pain and inflammation.

### SUBJECTIVE

Patient is a 35-year-old woman presenting with bilateral multiple joint pain which began approximately 18 months ago. She describes bilateral knee and shoulder pain, pain in her wrists, hands and ankles. Her symptoms originally began with pain in the right shoulder, which after 1 to 2 months was followed by pain in her left shoulder. Within 2 to 3 months, the pain spread to her wrists, then hands. The most recent development has been the pain in her knees and ankles, which began approximately 6 months prior to her first consultation at this clinic. She reports that the severity of the pain in each affected joint is intermittent and unpredictable, and has a tendency to move around. She describes the pain as aching and stiffness, which is worse at night, and for which she takes non-steroidal anti-inflammatory medication (aceclofenac 200mg). This allows her to sleep an average of 6 to 7 hours straight per night, whereas without it she only manages to achieve 5 to 6 hours per night of broken sleep.

Prior to the onset of joint pain, the patient reports she had intermittent cold and flu symptoms over a period of 12 months, including nasal congestion, sore throat and generalized body aches. She did not consult any health practitioners regarding these symptoms.

She was prescribed medication approximately 12 months ago, which she had been taking up until 2 months prior to this consultation. She reports that the medication has provided no relief, therefore she has ceased taking it. Her symptoms have not noticeably worsened since ceasing the medication. She has been having Ayurveda oil massage and steam baths every other day for the past 12 days. This has not provided any relief.

The patient reports that the most severe pain is in her right hand, in particular the fifth metacarpal joint, and in her left shoulder.

Bowel movements are 1 to 2 times daily and fully formed, and urination is 3 to 4 times daily and is pale to medium yellow in colour. Menstruation is regular with mild pain with medium to heavy bleeding for 2 days and light flow for 3 days. Her sleep is disturbed by pain, for which she takes anti-inflammatory medication, daily, to manage.

Stiffness and pain is worse in the morning and for the first 1 to 2 hours upon waking, is less in the afternoon and then worse again late at night.

### OBJECTIVE

Patient's overall health appears to be above average for age and environment. Her demeanour is generally relaxed and cheerful, but with a tendency to carry herself with a slight unease. She occasionally winces due to pain. There is distinct rebound tenderness when palpating the joints of the right hand compared to the left, especially

the metacarpal joints. There is also strong palpable tenderness when applying mild to medium pressure to the medial and superior borders of the scapula on both shoulders, and when applying medium pressure to the posterior and anterior borders of the glenohumeral joint of the left shoulder. There is distinct tenderness when applying moderate pressure to the lower borders of the patella and medial epicondyle of the tibia on both knees. Ankles do not produce distinct tenderness when palpated.

The knees, ankles and fingers can be passively and actively moved through all range-of-movement without restriction, with the exception of the left shoulder, which triggers pain on passive and active lateral abduction above 90 degrees. There is no apparent swelling of the joints in the knees, shoulders and wrists and none appear misshapen.



There is mild palpable swelling in the fifth metacarpal joint of the right hand. The joints of the hands and knees feel slightly warmer to touch than others.

Tongue is light red with normal body, thick yellow root and red tip. Pulse is rapid and slightly slippery.

### ASSESSMENT

DX: Initial blood analysis taken at the Arthritis & Rheumatic Diseases Treatment Centre in Lalitpur, 12 months ago, shows elevated serum rheumatoid factor and raised white blood cell count. This result, combined with symptoms of multiple bilateral joint tenderness, mild joint swelling (in greater than 3 joints including in the hands and wrists), and morning stiffness for greater than 1 hour, resulted in the patient meeting the criteria for a diagnosis of rheumatoid arthritis which was given at the above clinic where her initial assessment was carried out.

TCM DX: Wind-damp bi syndrome due to damp-heat, and wind-heat toxin due to latent heat invading the joints causing qi and blood stagnation and damp retention. Over time, if left unabated, this typically would lead to swelling and deformity due to phlegm stagnation and blood stasis.

PROGNOSIS: Besides mildly visible signs of synovial thickening in several small joints, the patient is otherwise free from any severe pathological tissue changes. Therefore, successful management of systemic joint inflammation may help to preserve the mobility and dexterity of the joints. Depending on the outcome of acupuncture and herbal treatment, this may include conventional drug therapy.

### PLAN

Treatment principles: Dispel wind, resolve damp and clear toxic heat. Open channels and collaterals. Invigorate qi and blood.

Treat with acupuncture 2 to 3 times weekly for 10 treatments before reassessing. Treatment approach is to use Shaoyang channels to dispel wind and damp and Yangming channels to purge heat toxin and move qi and blood. Points are also used to nourish blood and qi to anchor wind and prevent pathogenic factors from attacking the channels.

Typical treatment: TB5 and GB41, needled contra laterally, with Shaoyang points such as TB2, GB39, GB35, GB36 and GB34 to dispel wind-damp from the channels. LI11 and ST3 are used to expel heat. SP6 is used along with LI4 and LIV3 to anchor wind and circulate blood and qi throughout the body.

At the third consultation, Shu Jin Huo Xue Tang was given as a powder with a dosage of 4g twice per day to dispel wind and damp, invigorate blood and remove blood stasis. The prescription is to be followed for 10 days and then reassessed.

### OUTCOME

As early as the third consultation, she found it easier to walk for longer periods, as she had less pain in both knees and no pain in her ankles. She could take a shower without pain, whereas before, this used to cause pain in her shoulders and hands. The palpable pain in the first and second metacarpal joints of both feet increased significantly since the fourth treatment, with distinct visible and palpable swelling. Initially, she had reported mild pain in these joints



and no noticeable swelling.

After 10 acupuncture treatments over 5 weeks, the patient reported having not taken painkillers for 2 weeks and was sleeping 6-7 hours per night without them. She reported only mild pain in her left shoulder (the initial site of most pain) with some mild to moderate tenderness upon palpation around the medial and posterior borders of the scapula. She could laterally abduct her left shoulder to 120 degrees and passive abduction was to 160 degrees without pain. Palpation of the medial epicondyle of the tibia of both legs produced mild to moderate pain.

From treatment to treatment, the patient reported fluctuating levels of pain and inflammation in her left elbow and both hands. In particular, the pain in her left hand would move from joint to joint, sometimes over a period of 24-48 hours.

After the fourth acupuncture treatment, the patient had been recommended by a friend, to consult a Tibetan medicine doctor specializing in the treatment of arthritis. It was agreed that she would cease the Chinese herbal medicine and proceed with the Tibetan herbal medicine prescribed to her alongside acupuncture. Tibetan herbal medicine would be more consistently available to the patient over a longer period.

### CONCLUSION

This patient experienced a significant reduction in pain and inflammation within 10 treatments. She is advised to continue treatment 1 to 2 times weekly for another 4 to 6 weeks with the hope of continuing to improve her symptoms. Whether or not acupuncture treatment and herbal medicine alone, without conventional drug treatment, will result in a full remission from symptoms, is unknown. However, it appears that acupuncture may be a useful therapy for managing pain, inflammation and preserving joint mobility and delaying long-term site and enzymatic damage, which usually results from persistent and chronic inflammation and swelling of the synovium in the joints. It is also possible that her progress over the last 6 treatments was aided by the prescription of Tibetan herbal medicine. However, as she experienced significant relief after the initial 4 acupuncture treatments, it is presumed that acupuncture has and may continue to play a significant role in managing her symptoms.

## CASE STUDY: Parkinson's Disease

Jessica Maynard MAcOM LAc

### OVERVIEW

72-year-old female presents with left hand tremors that extend up the arm and into her neck and jaw. Tremors have been present for 2 to 3 years. Hospital and doctor records report Parkinson's disease. Over the course of treatments, the patient experienced periodic relief, with regression and return of tremors. Overall, her posture, mood, outlook and sense of independence improved, leading to a significant improvement in personal affect over time.

### SUBJECTIVE

Patient presents with tremors in her left hand and arm, extending up through her neck and into her face and jaw. Hospital charting from 6 months prior shows a diagnosis of Parkinson's disease. The patient reports having previously taken tri-hexyphenidyl hydrochloride, propranolol hydrochloride, levodopa and carbidopa tabs, but states that she is not on them now and is seeking a cure from Chinese medicine and acupuncture. She also reports having been diagnosed as a diabetic and declares that she has blood sugar levels tested regularly. The most recent reading was 145 mg/dL.

O-Tremor symptoms have been present for 2-3 years.

P-Patient reports that warm weather alleviates her symptoms and cold weather exacerbates.

Q-In addition to tremors, she experiences numbness in her tongue and has trouble speaking clearly, a symptom that fluctuates on a weekly basis. She reports mouth dryness, dizziness and blurry vision when walking.

R-Tremors begin in her left hand, move up into her arm, and eventually spread to her neck and jaw. During the course of treatment, the patient reported experiencing tremors in her right hand and arm as well.

T-The patient reports constant tremor while in a waking state throughout the day and evening.

### OBJECTIVE

The patient presents with stooped posture while walking, arms held closely in front of her. While she sits in the treatment chair, her hand and fingers tremor with an inch of movement back-and-forth. Her lower jaw shakes when she is not speaking. The tremors disappear with movement, and her movements are bradykinetic. She exhibits signs of depression from day-to-day—diminished affect, low voice, frequent sighing and responds to questions about her condition with frustration.

From treatment-to-treatment, her tongue changes from pale and dusky to more red, and sometimes purple-tinged. Her pulse is thin and easy to push through, but at times will have a wiry/tight quality or will show a superficial flooding or slippery quality.

### ASSESSMENT

DX: Parkinson's Disease

In order to differentiate the patient's diagnosis of Parkinson's disease from benign essential tremor, it is important to clarify the differences.



**Benign essential tremor**—Typically hereditary, benign essential tremor is characterized by tremor present with movement and absent at rest. It is normally bilateral and increases with age (Merck, Mayo Clinic). Essential tremors are not associated with stooped posture or shuffling gait, although they may cause other neurological symptoms. Benign essential tremors typically start in the hands, and can eventually affect the voice and head.

**Parkinson's disease**—Characterized by voluntary and involuntary movement affected by tremors, the symptoms typically begin unilaterally, but can progress to affect the body bilaterally. Symptoms are mild at first, and the severity of the disease is quite variable from person-to-person. Cardinal symptoms are: tremors, rigidity, bradykinesia, postural instability and Parkinsonian gait (characterized by short, shuffling steps and diminished arm swinging). Secondary symptoms include: anxiety, confusion, memory loss, dementia, constipation, depression, difficulty swallowing, slow, quiet speech and monotone voice.



To note, occurrences of misdiagnosis can happen. There are no medical tests for this disease and a definitive diagnosis of Parkinson's is not possible while a patient is still alive. The most accurate diagnosis would be made by a neurologist who specializes in movement disorders. Therefore, the true diagnosis in this case study is speculative and impossible to confirm.

The patient exhibits stooped posture, impaired gait (she requires help walking to clinic on certain days), and holds her hands stiffly in front of her, while walking in a shuffling manner. She also experiences tremors while seated with hands in her lap (at rest). It appears likely that her condition is, in fact, Parkinson's disease. During the course of treatments, she displays intermittent confusion and memory loss, both in repetitive questions, the need for counseling on her condition, and interpreters stating that she is incoherent. These are indications of possible mental degeneration accompanying the Parkinsonian condition.

TCM DX: The patient shows a mixed excess/deficiency pattern consisting of underlying deficiencies leading to uprising of excess, Kidney yin deficiency and Liver blood deficiency, with an uprising of wind in the channels, Liver qi stagnation and uprising of Liver yang.

KI yin deficiency is apparent with thin pulse, red tongue tip (empty heat) and low back pain, and can partially be assumed with age (72) of the patient. Liver blood deficiency is apparent in the thin pulse that is easy to push through, the dizziness and blurry vision with activity, and dryness of the tongue. Wind in the channels (due to blood deficiency) and uprising of yang, is exhibited by the tremors, and can be detected in the pulse. Liver qi stagnation is exhibited by frequent sighing and mood swings from day-to-day. Blood stagnation and empty heat alternate in her pattern. Tremors are observed by the practitioner as more pronounced when stagnation is present, indicated by the dusky and/or purple tongue alternating with a redder tongue tip concurrent with less pronounced tremor of the hands and mouth.

### INITIAL PLAN

Treat 3 times per week for 3 weeks. Diminish wind in the body while tonifying underlying deficiencies.

Typical treatment: Scalp tremor line, later with electro-acupuncture. ST36, LR8, SP6 to nourish blood, KI3, LI4 and LI11 to diminish stagnation and clear heat, as well as locally to treat tremors in the arms. GB20 is used to expel wind. Tiger warmer therapy is applied to the left arm, and often both arms and the sides of the face and neck. Electro-acupuncture typically connecting points LI11 and Hegu (LI4), or LI5.

Additional treatments: ST3, ST4, ST41 and LR3. Parkinson's may be a condition of reversal of Stomach channel qi, which enters the GB channel through ST8 (Janice Walton-Hadlock). An intention of descending Stomach channel energy has come to be a focus in treatment.

Herbal formulas prescribed include Gastrodia 9 (Seven Forests formula) to diminish tremors and Tao Hong Si Wu Tang to move and nourish blood.

Patient is encouraged to engage in light movement of the body, and to receive massage from family members. She is referred to the physiotherapist, though exhibits significant resistance to exercise.

### OUTCOME

The patient arrived for treatment daily for a total of 6 weeks.

Tian Ma Gou Teng Yin (for wind) and Liu Wei Di Huang Wan (for Kidney yin and blood tonification) were later added to her treatment plan.

She only had 1 visit to physiotherapist.

Given the advanced state of the patient's condition, it was clear that acupuncture may not decrease symptoms of tremor over the long-term, but may help on a short-term, symptomatic basis. The patient experienced relief the night after each treatment, less numbness in her tongue, and an increased ability to speak clearly. However, her condition would subsequently relapse after each period of relief, so it cannot be known whether the acupuncture and herbs were helping, or if it was a natural regression of symptoms typical of the disease. Significant time was committed to answering the patient's (sometimes repetitive) questioning of her condition, educating her about the severity and irreversibility of the disease, and encouraging her to think positively and actively engage in her own process of healing.

What was striking over time was the improvement in the patient's mood and affect. She began to walk to clinic on her own on a regular basis and was visibly happier over the course of treatments. Her posture improved, and she became more engaging, which despite her shifting moods, remained at a higher level than when she originally came into the clinic (although this can be due to trust and relationship that grows over time between patient and practitioner). As seen within the first 5 treatments, her mood changed significantly and her speech clarified. She was more likely to engage in conversation, both with her healthcare provider, as well as with family, and began to open up.

In subsequent treatments, she exhibited moods that showed a decline in outlook, including frustration over not experiencing the amount of relief desired, and seemingly, over a lack of control over her body and her life. During the fourth week of treatment, the patient reported a remarkable improvement. On 1 visit, she stated that she experienced the feeling of being "completely cured" following her treatment the day before. This type of relief, although short-lived, also added to the hope and positive outlook that overrode her frustration throughout the course of treatments. After 7 weeks in treatment, she went home to her village in a warmer climate, returned to the clinic during the ninth week, and reported a complete disappearance of symptoms while she was home. This brings to question both the power and possibility of acupuncture, as well as what the role of stress-reduction can play in Parkinson's disease and other neurological disorders. Acupuncture and Chinese medicine has been shown to reduce stress, and if relief of symptoms from disease is a secondary outcome, then the importance of this therapy is of paramount significance.

In the Vajra Varahi clinic, this patient experienced periodic relief of symptoms, with relapse and gradual decline. Parkinson's is a degenerative disorder, and slowing the progression became the main focus in direct treatment of the disease. In addition, the role of the acupuncture practitioner for this case has been one of guiding healthcare and outlook, counseling her towards a full understanding of her condition so that eventual acceptance is possible, and helping to facilitate a state of contentment and happiness that can be applied to her life as a whole.

## CASE STUDY: Lumbar Stenosis due to Osteoarthritis

Sarah Martin MAcOM LAc

### OVERVIEW

36-year-old female with lumbar spinal stenosis presents with severe low back pain with referred pain down the posterior left leg and anterior right thigh. The patient lives several hours from the clinic, but was able to stay in Kathmandu temporarily in order to get daily treatment for 2 weeks. After 12 treatments, the patient reported 80% of her pain relieved for a sustained period of 4 days, after which the pain started to slowly return.

### SUBJECTIVE

The patient presents with severe low back pain with referred pain down the posterior left leg and anterior right thigh. The pain interferes with her ability to walk without limping. The issue had a gradual onset beginning 3 years ago, continually getting worse, and within the last year it has increased to severe pain. Nothing helps the pain and the patient reports that it is made worse by bending, straightening, twisting, standing, walking and sitting too long. The patient describes her pain as severe, with a sharp burning quality running from the left PSIS area down the posterior portion of the thigh to the middle of the posterior calf and down both the anteromedial and anterolateral portion of the thigh just above the patella. The patient rates her pain as intolerable and constant. No muscle weakness or stiffness are reported. Due to the cost of recommended surgery, the patient hopes acupuncture can help her avoid surgery and perhaps slow the long-term progression of the arthritis.

### OBJECTIVE

The patient received an MRI, which showed compressed nerves due to the narrowing of disc space between lumbar vertebrae 4 and 5. She was informed that the disc space is narrowing due to arthritis of the spine and surgery is necessary to scrape the bone away from her nerve.

The patient reports no use of any prescription medications or OTC pain relievers.

Patient appears to be in good health, besides dealing with severe pain. Because of pain, the patient appears to be severely distracted, however can answer questions competently. The patient walks with a limp in her left leg. She is unable to sit up without assistance after laying down for the treatment due to the severity of her pain, rather than weakness. All transitions between positions - sitting, lying, standing - are strained and painful.

The Valsava test is positive with severe pain referring down the posterior left leg and anterior right thigh.

Palpation shows no significant findings on her lumbar spine, but shows her pain starting at L3 to under L5 and surrounding the posterior superior iliac spine (PSIS) and down into the sacral foramen, especially S2. Her right PSIS is more proximal than the left and tension is found in the right piriformis. Palpation down the left posterior thigh shows pain directly down the Bladder meridian to BL57 and palpation at the right anterior thigh shows the pain running along both Spleen and Stomach meridians to SP10 and ST34 region.

Patient shows no signs of muscular atrophy. Difficulty in walking is due to pain, rather than weakness.

Her blood pressure and heart rate are within normal limits at 113/84 and pulse 72 b/m.

### ASSESSMENT

DX: Lumbar spinal stenosis with narrowed disc space between L4 and L5. Possible subluxation of the sacral iliac joint. Due to her age, it is hypothesized that she has the congenital form of lumbar spinal stenosis.

Medical recommendations from hospital: It is likely that the doctor at the hospital is recommending a laminectomy, foraminotomy or a nerve block.

TCM DX: Bone bi syndrome with qi and blood stagnation in the Bladder, Governing Vessel, Stomach and Spleen meridians with underlying Kidney essence deficiency and Liver blood deficiency.

PROGNOSIS: Due to the severity of the condition and the nature of lumbar spinal stenosis, the prognosis is fair with regular treatments. The patient is young. In the long-run, treating with just acupuncture and herbs leads to a likely poor prognosis. These modalities may delay surgery, but chances are, will not eliminate the need for it.

### INITIAL PLAN

Treat with acupuncture daily for 7 treatments and then reassess.

The treatments focus on breaking up qi and blood stagnation in the Governing Vessel, Bladder, Stomach and Spleen Meridians with electro-acupuncture as the main modality. Internal herbal treatment includes Huo Luo Xiao Ling Wan and Xiao Huo Luo Dan Wan. These formulas are used to break up blood stasis, open the collaterals and move qi and blood to stop pain.

Typical treatment: Left: SI3, ashi BL57; Right: BL62, LI4, GB21; Bilateral: HTJJ L3 – L5, Shi Qi Zhui Xia, ashi PSIS area, BL32 – 34, GB30, Huan Zhong, BL40, BL60. Electro from left HTJJ L5 to left BL60, right ashi PSIS to right BL60 and bilateral BL32 to BL40, 5/100 Htz milliamp with mixed frequency. Pain patches and ear seeds are utilized to increase the effects of treatment outside the treatment room. Salonpas pain patches with camphor and menthol to provide a cooling analgesic effect and ear seeds on lumbar spine and sciatic points are also given at the end of each treatment.

Alternate treatments: Right: ST34 and ST41 for right thigh pain, superficial transverse needling with manual stimulation of ashi points surrounding the PSIS for sacral realignment.

**OUTCOME**

Due to the circumstance of the patient living several hours from the clinic, daily treatments were given for the first 12 visits. On the 12th treatment, the patient reported 80% of her pain was relieved and tolerable. Bending, straightening, twisting and walking no longer caused her pain. Furthermore, she no longer needed assistance in getting up from the prone position. The patient could walk without a limp. The 13th treatment was spread out to 5 days later to observe if the pain relief could be sustained. On the 13th treatment, the Valsava test indicated considerable treatment results with moderate pain only at BL32, rather than severe sharp, burning pain radiating down the posterior left leg and anterior right thigh as seen on the first visit. It was reported at this visit that 80% pain relief was sustained for 4 days after the 12th treatment, at which time the pain began to return slightly. However, she felt enough pain relief to return home to spend the Dosain holiday with her family and start work for the harvest season. The outcome was better than I, the practitioner, initially expected. Perhaps the MD's assessment for surgery was premature and the original prognosis was understated. With continued acupuncture and herbal treatment, the inflammation and pain could be reduced long-term and the degenerative nature of the disease might be slowed.

**CONCLUSION**

Due to the inflammatory process and degenerative nature of lumbar spinal stenosis, regular acupuncture and herbal treatment might be the best option for long-term pain relief and slowing the progression of her arthritis. The patient was informed that regular acupuncture and massage treatment might be the only alternative to surgery. Due to the logistics of living so far from the clinic, if her pain returned or worsened, surgery might be her only option for sustainable pain relief.

## CASE STUDY: Low Back Pain with Urinary Difficulties

Kelli Jo Scott MAcOM LAc

### OVERVIEW

32-year-old woman presents with constant low back pain and burning urination. She has been diagnosed with severe hydronephrosis in the right kidney and, due to pain, recommended to have a nephrectomy. After 10 treatments with various Chinese medicine modalities, her pain was reduced by 50% and the frequency of her pain was only every 2-3 days. The burning urination resolved.

### SUBJECTIVE

A 32-year-old woman presents to the clinic with a chief complaint of low back pain on the right side in the kidney area, which radiates up the thoracic region of the erector spinae muscles and over to the left kidney area and left thoracic region erector spinae muscles. The pain is described as constant and achy, with sharpness that comes and goes. The onset of this pain was about 1 year ago and nothing seems to change it. Her second complaint is continuous burning urination. She reports no urinary hesitancy, urgency or frequency. The urine is clear to light yellow and output is equal to input. The patient reports some dizziness when standing up and occasional night sweats (2-3 times per week). All of these symptoms have been present for a little over 1 year. Previous to the onset of these symptoms, the patient reports no prior history of trauma to the area or kidney problems, nor has any significant family history of disease.

### OBJECTIVE

Patient appears to be in good physical, mental and emotional health for her age and environment. She is soft spoken, but seems educated, engaged and alert. She is the mother of 2 children, ages 2 and 6, and comes from a higher caste, which increases her access to healthcare. Her pulse is slightly rapid and slippery, her tongue red and quivering. Upon palpation of the area of chief complaint, bilateral moderate muscle tension along the thoracic region of the erector spinae muscles, more tightness on the right, is noted. On the ninth visit, the patient brought in lab tests and imaging that had been taken 13 months previous to initially being seen in the clinic. They reveal that her right Kidney is smaller in size and significantly compromised in function. The left Kidney measures 11.5 cm in length, while the right Kidney measures only 7cm. A diuretic renogram taken 1 year ago, reports 94.1% differential function in the left Kidney and 5.9% in the right. The glomerular filtration rate (GFR) of the left Kidney was 88.8; the right Kidney GFR was 3.5. The most recent imaging and urinalysis, 5 months ago, reveals that her right Kidney has become even more compromised and surgery to remove the diseased Kidney was recommended.

### ASSESSMENT

**DX:** Atrophied, poorly-excreting right Kidney with severe hydronephrosis and a thin renal cortex; Hypoplastic right renal artery  
**TCM DX:** Kidney qi and yin deficiency with deficiency heat; Qi and blood stagnation in Bladder meridian

**PROGNOSIS:** Originally, the prognosis for resolving the complaints of low back pain and burning urination, in an otherwise healthy young woman, was quite good. All of that changed on her ninth visit to the clinic, when upon our request, she presented her full history of



medical reports and imaging studies to us for the first time. Due to the severity of her condition, the long-term prognosis for the health of the right Kidney is poor. But due to her response to the treatment thus far, the prognosis for alleviating her symptoms with acupuncture and herbs is good.

### INITIAL PLAN

Acupuncture treatments twice per week for 5 weeks and then reassess. Focus on tonifying Kidney qi, nourishing yin and re-establishing the free flow of qi and blood to the local area. Herbs are given to tonify Kidney qi and yin and promote urination.

A typical acupuncture treatment includes the following points: DU20, BL23, BL24, BL26, BL28, BL40, KI7, KI3 and SP6. On several treatments, thread the inner Bladder line all along the thoracic vertebral region due to tightness along the erector spinae muscles and referred pain, especially on the right side. Electro-acupuncture (continuous @ 5 Hz and mixed 2/100 Hz) is used in the low back area bilaterally, as well as localized massage.

Ba Zheng San to clear heat and Dao Chi Wan to promote urination.

### OUTCOME

After 10 treatments, the patient reported significantly less intensity (50% less) and frequency of the low back pain. Burning urination resolved. She also reported no more dizziness or night sweats. The low back pain was no longer constant or even daily in occurrence,

sometimes only noticeable every 2-3 days. The best herbal formula results were seen with Dao Chi Wan, given at appointments 9 and 10. During her re-evaluation at treatment 10, the patient volunteered that she had good energy and felt strong.

### **CONCLUSION**

As far as the medical reports for this patient conclude, the nephrectomy was recommended primarily due to the fact that she was experiencing pain. With 10 treatments of acupuncture and herbs, we were able to reduce the pain significantly in both frequency and intensity (50%). She was also no longer experiencing any burning during urination. If at some point, she no longer experiences pain or other symptoms, and her bi-annual scans and tests reveal continued normal function in the left Kidney, I feel it is reasonable to assume that she could potentially avoid the surgery altogether.

### **CONTINUED TREATMENT**

The patient was aware that there is a high likelihood that she will eventually need to have the Kidney removed. She planned to continue to be monitored by her medical doctor and have imaging done approximately every 6 months or more frequently, if symptoms increase, to assess the progression of the hydronephrosis. Acupuncture and herbs, at this time, are useful palliative care and should be continued at the current course, as long as the symptoms are present. When the symptoms are completely alleviated, a maintenance course of treatment (once per week) should be implemented to maintain the strength of the system and to potentially improve Kidney function bilaterally.



## CASE STUDY: Stroke Sequelae

Jeanne Mare Werle MACOM LAc

### OVERVIEW

50-year-old male presents with post-stroke sequelae symptoms manifesting as severe right-sided paralysis. After 10 treatments starting in September 2012, the patient exhibited improvement in his condition and fair measurable progress.

### SUBJECTIVE

The patient had a stroke in November 2011. He received medical attention 24 hours later at the hospital and was treated with western medical pharmaceuticals unknown to the patient. He stayed in the hospital for 9 days. While at the hospital, he learned of an acupuncture program in Kathmandu. He began getting treatments there 14 days after he left the hospital. He doesn't remember exactly how many sessions he had. Perhaps about 7. He came to the Vajra Varahi Clinic in March 2012. Prior to my attending him, he had 15 treatments at the clinic. Current symptoms are paralysis of the right side of body, numbness in the hand and foot, inability to move fingers or toes, numbness of his lips (right side) and tongue, difficulty walking, an unsteady gait, the sensation of weakness in the right knee and ankle, stiffness in the shoulder, elbow, wrist, hip and knee joints, general fatigue and heavy sensation in the body. The patient is worse in cold weather, fatigue and when hungry. The quality of sensation that the patient experiences in his body is heavy, achy, tingling and weakness. The severity of the condition and the impact on his life is immense due to his inability to work, care for his animals or farm his fields.

The patient reports difficulty in walking due to his toes having no ability to move. This requires the patient to lift his leg straight up and land the foot on the whole sole as opposed to heel-to-toe walking. This gives the patient an unsteady gait that he reports also makes his knee feel like it could give out. The distance the patient walks to the clinic from his home would have taken him 20 minutes prior to the stroke. Currently, it takes him close to an hour.

While in the hospital, the patient received 1 physical therapy session. The patient maintains an exercise routine based on what he learned in PT while at the hospital. He reports that he massages his foot and hand daily. He doesn't take any western medication or supplements, though he does take Tibetan herbs.

Despite the extent of his symptoms, the patient identifies that he would like to focus on improving his speech, reducing the swelling around his lips on the right side, regaining some use of his right hand and improving his ability to walk and feel more balanced.

### OBJECTIVE

Patient appears to be in good health with a strong spirit and determination to improve. He has spent his life working the land and raising animals. This has taught him patience and endurance.

The patient's left arm is used to lean on a walking stick as he raises his right leg directly up from his hip and places his foot down on the whole flat of his foot, as if it were one solid block. He is unable to walk in a normal heel-to-toe stride. His right hand is contracted and he holds his entire arm tight against his belly. His face appears symmetrical and bright except for about 10% swelling in the right upper and lower lips.



When seated, the patient uses his left hand to move his right hand into position. The right hand is contracted, however passive stretching of the digits and opening of the palm happens easily and reveals tremendous flexibility. The patient has a medium-strength grip in his right hand, about 50%, compared to the left. He has no ability to extend the fingers or even wiggle or twitch them. After opening the hand, it slowly folds back into a soft contraction within a few seconds.

Sensory testing using light, medium and heavy stroking of the patient's affected areas, while the patient has his eyes closed, shows complete response. Hip flexion and extension has normal ROM, however the strength of the hip is reduced by 30%. Hip flexion and extension are occasionally affected by stiffness in the hip joint from the action of lifting the leg to place the foot. Most of the stiffness remains in extension position. Although I do not speak the patient's language, I can hear that there is very minimal slurring in his words. When the patient leaves the treatment, he lifts his leg off the ground about 2 inches higher than when he came in.

Tongue – swollen, pink, light white coat

Pulse – slightly rapid, superficial and wiry

### ASSESSMENT

DX: Post-stroke sequelae with paralysis of the right hand, fingers, foot and toes; Overall stiffness, weakness and heaviness

TCM DX: Qi & blood deficiency; KI yang deficiency; Wind & phlegm obstructing the channels and collaterals

PROGNOSIS: The prognosis for a full recovery is poor, however we expect some hand mobility to return and sensation to continue returning to the foot and toe's. As these functions return, we expect to see less weakness and stiffness in the joints affected by the stress caused by the impairment. The treatment plan will need to be long-term and the patient must remain hopeful and committed.

## INITIAL PLAN

Treat with acupuncture 4 times per week for 3 months before reassessing. Focus on strong stimulation with electro-acupuncture crossing affected joints. Use scalp points associated with motor function of upper and lower limbs using hand stimulation of needles.

Typical treatment: Left: Dr. Zhu motor points for upper and lower limbs with deep insertion and heavy stimulation. Dr. Zhu speech points on scalp.

Right lower: Ba Feng, KI1, LV3, GB41, KI3, SP3, SP6, ST41, GB39, ST36, GB34, KI10, He Ding, Xiyuan/Xiyuan, ST34; Right upper: Baxie, HT8, PC8, PC6, Xu Duan – 10 drains on the right hand and right toes, TB5, LI10 X 3, LU5, biceps ashi

Electro: 2/100 mixed – Dr. Zhu scalp points, biceps ashi – PC6, LI4 – LI10, ST 34 – ST 36; Alternative treatment consists of similar points crossing joints such as KI10 – KI3, SP6 – SP3 and/or GB34 – ST34.

The patient is given a bottle of Po Sum On (aromatic oil) and instructed to use it with his home routine that includes daily massage and physical therapy. Included in home therapy are visual exercises to stimulate the brain and motor connection. The patient is instructed to first perform the physical therapy routine with the unaffected side of the body while creating a strong eye connection with the movements. Then, the patient performs the same movement therapy with the affected side, again keeping a strong visual connection.

The patient uses Tibetan medicine as his herbal treatment and expresses positive feelings about this. Keeping detailed track of all changes and astute observations with each treatment is imperative. The smallest details are critical to observe and note, both for the clinician and patient. Constant encouragement through the likely long process of healing must not be overlooked. Reminding the patient of all the changes at each session will help in the process of staying positive.

## OUTCOME

Patient reported that over the course of the 9 treatments, he has, for the first time, noticed significant improvement. After each treatment, he reported more nerve sensation in his hands and feet, with greater ROM in his knee and ankle. The swelling in his lips responded immediately to the treatment and the patient reported clear speech. The patient had a 10-day lapse in treatment, which brought back 30% of the lip swelling and 5% of the speech problem. After 1 treatment, clear speech returned, even though the lip swelling returned quickly after treatment. The quality of the stiffness and pain is reported by the patient as deep, dull and achy. ROM in the shoulder joint and elbow progressed from about a loss of 40% in extension to 10% with complete disappearance of shoulder pain. There was still achy pain in the bone in the elbow joint. The contracture in the right hand remained, rendering the hand useless still, but the hand had a softness progressively allowing the hand to stay open longer. The patient reported a tingling sensation in his 3rd & 4th fingers which may be a forerunner to the return of nerve function. The patient was able to place his heel on the ground and land on his toes though there was a slight supination of the foot upon landing on the toes.



## CONCLUSION

In the past, this patient received acupuncture treatments of a more constitutional nature without any change to his symptoms. His current response to treatment has been exciting. He has had fair outcomes with measurable changes in symptoms. At this time, the patient mostly hopes to regain sensation and functioning in his toes so that he may improve his gait, as walking is the only option he has in his village. It is imperative for the patient to continue with regular treatment in order to maintain the progress that has been achieved. In stroke cases, it appears that focused, aggressive and frequent treatments are critical. Using visual exercise where the patient first does the physical therapy with the healthy hand or foot, while keeping focused on the movement to imprint on the brain, and then repeats the same exercise with the affected hand or foot is important as are home massage and physical therapy in conjunction with acupuncture treatment. It is also important in working with post-stroke sequelae that the practitioner employ careful documentation and critical observation so to better track changes, however big or small, in the patient's condition. Constant encouragement and reminders of change help to show the patient their progress throughout the frequently slow healing process.

## CASE STUDY: Neck Pain with Radiation

Amy Schwartz MAcOM LAc

### OVERVIEW

40-year-old male presents with right-sided neck pain, without nerve radiculopathy, down the arms bilaterally. He has seen his physician who diagnosed him with nerve impingement and wants to do injections of Xylocane and Tricant local to the area of pain, inferior and slightly lateral to his occiput. After 6 acupuncture treatments, including electro-stimulation, massage and topical pain patches, the patient reports improvement in pain frequency and quality.

### SUBJECTIVE

Patient presents with right-sided neck pain that has been present on and off for the last 5-6 years, but has become constant over the last month. The pain can be worse with cold. Heat packs alleviate the discomfort. There is no radiculopathy, but he does notice that his left arm can feel weak when he's walking uphill. When it is most severe, he can feel pulling over his head to the frontal and parietal bones. He has had physical therapy in the past for right shoulder muscle spasms and they have resolved. He has no history of heart palpitations or hypertension. He is not currently taking allopathic medications.

### OBJECTIVE

The patient appears to be healthy and is comfortable answering questions about his discomfort. Upon palpation of his neck, tenderness is noted suboccipitally at the origin of the trapezius muscle and the insertion of the splenius capitus and cervicus muscles. The scalenes are also tight and tender. Palpation reveals a slight anterior rotation on the right of the first cervical vertebrae. Cervical compression, distraction and maximum compression tests are negative. His pulse is moderate, but thin and his tongue is red with a greasy, yellow coat. An x-ray report shows no clear indication of a problem. In comparison to the left, his ROM on the right is decreased with lateral flexion and rotation. The pain also increases with lateral flexion and rotation to the right. Grip strength in the left arm showed some weakness by comparison to the right and felt cooler to the touch.

### ASSESSMENT

DX: Possible cervical rotation of C1

TCM DX: Bi syndrome due to qi and blood stag in the DU and BL channels

PROGNOSIS: Acute phase- good; Underlying chronic phase will take time to unwind the fascia and muscle spasms that tend to sublux the vertebrae.

### INITIAL PLAN

Treat with acupuncture twice weekly for 4 weeks before reassessing. Focus treatment on loosening the muscles and fascia that are pulling the vertebrae out of alignment and impinging the nerve with use of acupuncture needles, electro-acupuncture and massage with traction and joint mobilization.

Typical treatment: GB20, 21, BL10, An Mian, ashi in cervical area and above occiput at the origin of the trapezius muscle, TB14, LI15, SI12-

13, LI4, LV3; Electro-acupuncture from GB20 to ashi in cervical region; Massage suboccipitally and into vertebrae with myofascial release techniques and traction; Local application of Salonpas topical patches with menthol and camphor to move qi and blood, thereby clearing stagnation and decreasing pain.

### OUTCOME

After 6 visits, the patient reported 80% less pain in the right suboccipital area and noted that the pain shifted to a broader area with less intensity. His ROM in lateral flexion and rotation to the right became equal to that of the left. He still felt a slight pulling in the muscles upon rotation to the right. He was encouraged by the treatments, noticing that his left arm felt better and strength had returned.

### CONCLUSION

This patient agreed to let us treat him in lieu of injections even after his doctor told him there was no other care available to him for his condition. This case shows some of the strengths of acupuncture and massage in making changes in musculo-tendinous conditions that are both acute and chronic in nature. He will continue to be seen twice per week until the pain is resolved, the ROM becomes equal and the vertebral subluxation shifts.



## CASE STUDY: Hemiplegia (Stroke Sequela) with Acute Lung Consolidation

Stephanie Grant MACOM LAc

### OVERVIEW

81-year-old female presents with complete left-sided hemiplegia following ischemic stroke 2 months ago. Over the course of 7 weeks of acupuncture treatment, the patient regained limited voluntary dorsi and plantar flexion of her left foot, flexion and extension of her knee and elbow, and increased sensation in her left arm. The patient also developed a cough due to fluid in the lower left lobe of her lungs 5 weeks after the stroke, a common concern for patients with limited mobility living in the cold and damp houses of Nepal. The cough was successfully treated with Chinese herbs.

### SUBJECTIVE

81-year-old female presents with hemiplegia of the left side as sequela of ischemic stroke. 1 week prior to initial assessment, the patient awoke from resting and was unable to move, her left arm and leg were numb, she could not talk nor open her left eye, and could not sit up by herself. Her family immediately transported her to the hospital where she was admitted for 4 days. At the time of discharge from the hospital, she had regained some limited speech and could open her left eyelid.

Initial exam is 7 days after the stroke. She reports inability to move either left limb and has limited movement of the left side of her face. She describes her entire left side as feeling heavy and numb. The patient tends to feel hot, particularly in the evening, and experiences night sweats. She has no appetite, a slight thirst for cold drinks, blurry vision, dizziness and complains of a dry throat.

Medications upon initial evaluation include Atorvastatin (Lipolow-10) 10mg QD, Aspirin 75mg QD and Ranitidine (R-Loc) 150mg QD.

### OBJECTIVE

Patient appears thin, weak and is bed-ridden at time of initial assessment. She is unable to sit upright without assistance. There is no atrophy of muscles on the left side. Her skin is dry to touch, and she exhibits some degree of hearing loss normal for her age.

The patient demonstrates no voluntary motor control of her left limbs. Her left forearm and hand is mostly contracted and cannot be extended with gentle force. She can slightly raise her left shoulder and can easily move her left arm with her right. Her left hip joint is slightly mobile, and there is no apparent contracture of her left thigh and leg. There is no notable temperature difference side-to-side on palpation. Both sides are warm when covered by blankets.

DTR's all measure +2 on the right and +3 on the left. Dull sensation is intact and equal on both arms and legs. Sharp touch is equal side-to-side on dermatomes C6, C8 and L5, but slightly decreased on dermatomes C7 and S1 on the left side at the distal tips.

The lateral corner of the patient's left eyelid droops slightly compared to the right, but she can raise and close both eyelids. The patient's left side of the mouth droops, and she cannot smile equally on both sides. She can puff out both cheeks. She exhibits slight aphasia and hardly responds to questions when asked. There is some moisture gathering at the lateral corners of her mouth and left eye.

Pulse is thin and taught across all positions, floating and rapid.

Tongue is thin and red with a thick, dry, yellow-grey coat.



### ASSESSMENT

**DX:** Left-sided paralysis as sequela of an ischemic stroke

**TCM DX:** Sequela of wind-stroke with wind-phlegm obstructing the channels and collaterals and underlying yin deficiency with empty heat

**PROGNOSIS:** Guarded as the patient is 81 years old and suffered an ischemic stroke. Factors in her favor include daily acupuncture treatments, continued progress in voluntary movement of her left foot over the first 30 treatments, and dedication from her family in assisting her recovery with constant care and physical therapy exercises at home.

### INITIAL PLAN

Acupuncture treatments 6 days per week with regular reassessments at 3-week intervals

Focus acupuncture on clearing wind-phlegm from the channels and collaterals with continuous monitoring of vital signs for evidence of hypertension or pneumonia, both of which pose a greater risk to the patient's life than post-stroke sequela.

Typical points include: Jiao's motor region right side upper limb

~ lower limb, left LR3 ~ ST36, GB41 ~ GB34, Ba Feng, GB39, SP6, LI4~LI11, Ba Xie, DU26, CV24, ST4, ST3, SJ23, Yu Yao [- indicates e-stim between points at 5Hz continuous for 5-8min). Total treatment time is limited to 10-15 minutes, as the patient is easily fatigued by acupuncture.

Counsel patient about twice-daily exercises to flex and extend left toes, foot, leg, fingers, hand and arm. Encourage routine exercises in spite of lack of joint movement. Encourage patient to go outside daily to sit upright in the sunshine and take short walks with the assistance of her family. Teach the patient's family to massage the patient's left limbs with mustard oil, gently moving the arm and forearm to full extension to reduce contracture.

## CONTINUING TREATMENT PLAN

### SUBJECTIVE

4 weeks into treatment, the patient develops a cough with inability to expectorate. She denies fever or chills, sore throat, headache, or tension in her neck and upper back. The little sputum she expectorates is thick, sticky and yellow-grey. She is living on the ground level of a brick and mortar house with hard pack dirt floors. She spends most of her time on a makeshift bed, consisting of a pallet of 3 blankets over top of a plastic tarp to protect her from the cold-damp weather of early winter in Nepal. The patient's family takes her outside daily in the sun to do exercises and rest in the warmth for a few hours each day. Otherwise the patient spends most of her time lying on her back in this room without electricity or heat.

### OBJECTIVE

Chest auscultation finds high-pitched crackles in the upper lobes, and percussion produces increased resonance in the lower left lobe of the lung. Blood pressure is 160/70mmHg, pulse rate is 68bpm, and pulse oxygen measures 92%. Oral temperature is 98.3 deg F.

### ASSESSMENT

DX: Possible consolidation of the lower left lobe of the lungs, likely due to immobility and secondary pulmonary hypertension. The exact cause and severity of the fluid in the lower left lobe of the lungs cannot be determined without additional testing.

TCM DX: Cough due to phlegm-heat in the lung

PROGNOSIS: Good as the condition is caught early and is monitored with auscultation of breath sounds at every acupuncture treatment. The patient's living environment will not change, however, and will be a continuous challenge throughout her recovery.

### UPDATED PLAN

Points added to the initial acupuncture prescription include LU5 and ST40.

Internal formula administered is Qing Qi Hua Tan Wan 8 pills TID for 3 weeks. The patient is also immediately referred to her allopathic physician for uncontrolled hypertension and is prescribed Amlodipine 5mg QD.

Counsel the patient and her family on adequate water intake and proper diet to reduce phlegm and hypertension.



### OUTCOME

After 36 treatments, the patient exhibited major changes in the motion of her left foot, and marked improvement in auscultation and percussion of her lungs. She described her limbs as feeling "lighter." At this time, she was able to walk slowly with the assistance of a walking stick and 2 other people, and she could stand with a walking stick and the support of 1 other person. Her shen/mood became much brighter as indicated by her laughter and smiling during treatments. She began to look forward to walking with her goats in the fields again.

The patient's left knee could actively flex and extend through 90 degrees range-of-motion. She could plantar and dorsiflex her ankle 5 degrees and dorsiflex her great toe voluntarily. The other toes could dorsiflex with needle stimulation. She could flex her left elbow 10 degrees and extend 5 degrees, but she continued to be unable to move her left fingers and wrist. Contracture of the left forearm significantly reduced with regular home massages, and the patient reported pain and tingling in her left arm after massage and acupuncture. Sharp/dull touch became equal side-to-side, while DTR's on the left were still at +3. The patient was also able to sit upright on her own for long periods of time without assistance, and her speech became much clearer and easier to understand.

The patient described her lungs as feeling less congested, and she found it easy to expectorate phlegm. Her lungs sounded markedly clearer on auscultation. High-pitched crackles remained, but there was no longer resonance on percussion of the lower left lobe. However, the lower right lobe exhibited some slight resonance with percussion. Her blood pressure reduced to 130/72mmHg, pulse rate was 72bpm and pulse oxygen increased to 96%.

Her tongue was thin and slightly red with a clear dry coat. Her pulse was slightly rapid, thin and taught across all positions.

#### **CONTINUED TREATMENT**

The patient will need continued daily acupuncture treatments with emphasis on clearing wind-phlegm from the channels and collaterals. The patient's blood pressure and lungs should be routinely monitored. Her physical abilities should be objectively measured every 3 weeks with emphasis on active range-of-motion, DTR's, sharp/dull touch and facial muscle testing.

With further resolution of the consolidation in her lungs, herbal treatment focus may shift from clearing phlegm-heat from the lungs to nourishing the patient's yin and clearing empty heat. The patient should be referred to allopathic care for more testing, diagnosis and stronger medications if the consolidation in her lungs becomes more significant, spreads to more than one lobe, if she develops a fever or if her blood pressure increases above 140/90mmHg.

The patient has responded well thus far to regular acupuncture and herbal treatments, and continued improvement is expected.

#### **CONCLUSION**

Routine acupuncture treatments are an effective method for regaining mobility post-stroke, particularly when used in conjunction with supportive home care and regular physical exercises.

In providing daily treatments, the acupuncture physician is in a unique position to serve as a primary care provider, monitoring for other physical ailments which may develop quickly and pose a significant threat to the patient's recovery. As demonstrated in this case study, routine auscultation of the lungs led to early diagnosis and treatment of fluid consolidation in this patient's lungs.



## CASE STUDY: Palliative Care of Parkinson's Disease

Tara Gregory MAcOM LAc

### OVERVIEW

62-year-old male was diagnosed with Parkinson's disease 8 years ago and has been receiving treatment in this clinic since 2009. This case explores the positive role that Chinese medicine can play in providing palliative care to patients living with a chronic degenerative disease.

### SUBJECTIVE

62-year-old male presents with a burning sensation in the body and bilateral trembling of the legs and arms. The burning sensation is felt in the head, knees and soles of the feet. It begins when he wakes in the morning, increases in severity during the day and subsides when he goes to bed. Patient reports that during flare-ups, his trembling and other symptoms decrease.

He experiences bilateral trembling of the legs and arms and trembling of the mouth and tongue. Symptoms began 8 years ago with trembling in the 5th finger on the right hand. It progressed up the arm and eventually lead to bilateral trembling of the arms and legs. Patient's family reports a lack of tremors during sleep, which resume upon waking. He notices a feeling of stiffness in the whole body, especially pronounced while walking. Patient expresses difficulty in remembering words and completing sentences, and that other people have difficulty hearing him when he speaks. Symptoms get worse with stress, sadness, fatigue, hunger and goat meat.

Associated symptoms include: day and night sweats, vertex headache, positional dizziness, vertigo, excessive salivation, constipation, thirst, pain and hesitancy with urination, mouth sores and difficulty with sleep. Patient expresses an understanding of the chronic nature of his condition and is sometimes overcome by sadness, worry and fear.

### OBJECTIVE

The patient presents with visible bilateral trembling of the arms and legs, and trembling of the mouth. Trembling is more severe in the patient's arms in comparison to his legs. His voice is noticeably diminished in both strength and volume, demonstrating signs of hypophonia. Patient exhibits bradykinesia of the upper and lower limbs while walking, a slightly unsteady gait and rigidity in movement.

Patient's tongue is purple with horizontal central cracks and a greasy yellow coat. His pulse is slightly rapid and wiry.

### ASSESSMENT

DX: Parkinson's disease

The patient presents with the 4 cardinal signs of Parkinson's disease: resting tremors, rigidity, bradykinesia and postural instability. Associated autonomic dysfunction is also present as seen in the patient's propensity to suffer from constipation and urinary difficulties. Laryngeal dysfunction and dysphasia, commonly seen in Parkinson's patients, are observed with softness of voice, vocal tremors and excessive salivation. Relief from symptoms with the use of Levodopa is often used as confirmation of a Parkinson's diagnosis,



and the patient has experienced relief with this medication.

TCM DX: LR and KD yin deficiency leading to fire and internal wind

**PROGNOSIS:** The prognosis for this patient must bear in mind the chronic and degenerative nature of his disease. The goal of treatment is to provide palliative care to help relieve the symptoms of the disease and the side effects of his medication. Treatment is also aimed at prolonging the effectiveness of his medication and to slow the progression of his disease. Additionally, the goal of treatment is to help the patient psychologically cope with his condition, and will at some point transition into providing a form of hospice care. Given these conditions, there is a good prognosis as Chinese medicine is effective at meeting these goals.

### PLAN

Treat 3 times per week to help moderate symptoms and slow the progression of the disease. Focus on reducing the burning sensation in the body by clearing heat and nourishing KD and LR yin. Internally, use the formula Zhi Bai Di Huang Wan in a dosage of 8 pills TID. Acupuncture point selection includes KD2, KD6, LU7, SP6, LI11, LR2, GB20 and Jiao's scalp tremor line.

As treatments progress and the burning sensation disappears, expand treatments to focus more on settling wind and helping with speech. The patient is switched to the formula Tian Ma Gou Teng Yin in a dosage of 8-12 pills TID. Acupuncture points are expanded to include TW5, DU15, DU16, CV24 and Jiao's scalp speech zone.

Treatments can last indefinitely so long as the patient continues to experience positive symptomatic relief. Reevaluate every 12 visits to assess progression of his condition.

**OUTCOME**

After 3 treatments, the patient reported a 2/3 reduction in the burning sensation in the head and a complete absence of burning sensation in the knees and soles of the feet. He also exhibited a visible reduction in bilateral trembling during and after treatment. The patient reported that the effects of treatment last for about 2 hours, and extend the effectiveness of his medication. His demeanor and affect became visibly lightened after treatment.

**CONCLUSION**

The difficulty of and question brought up by this case is understanding the role that Chinese medicine can play for patients suffering from chronic progressive diseases. This case demonstrates that the use of acupuncture and herbs can provide palliative care and help to increase the quality of life for patients by mitigating the symptoms associate with Parkinson's disease.

Additional questions arise due to the nature of side effects caused by Levodopa, which can help to control trembling associated with Parkinson's, but also causes trembling and other symptoms normally experienced by Parkinson's patients. It is difficult to assess how much the treatments address the symptoms associated with Parkinson's diseases versus the side effects of the patient's medications.

Ultimately, the effects of treatment are beneficial, as they provide symptomatic relief for the patient, and may help keep the patient on the lowest dose of medication possible for the longest period of time. Furthermore, the effect of acupuncture and tri-weekly treatments to help patients cope psychologically with the reality of their condition, cannot be understated, as many patients with Parkinson's disease are susceptible to depression. The patient expresses that while he has an understanding of the progressive nature of his condition, coming in for treatment not only provides him with relief from physical symptoms, but also provides him with a sense of hope.

## CASE STUDY: Outer Ear Infection

Natalie Gregersen MAcOM LAc

### OVERVIEW

52-year-old male presents with right-sided, burning head and ear pain, right-sided hearing loss and anosmia. It is determined, after an initial ear examination with an otoscope, that the patient has a severe right-sided ear infection. After 12 treatments, which includes the use of acupuncture, internal and external Chinese herbs and antibiotics, the patient reports a significant reduction in the burning sensation. Objectively, the right side tympanic membrane shows a 90% improvement. There is no change in the anosmia and hearing loss.

### SUBJECTIVE

The patient presents with right-sided, burning head and ear pain that started 6-7 months ago. His symptoms also include right-sided temporal headache, an itchy sensation deep in the right ear, tinnitus that comes and goes and right-sided hearing loss. He reports he can hear people talking, but can not clearly understand what they are saying. Anosmia started 2-3 months after the burning head/ear pain started. The patient reports that it feels like he has a 'fire' inside his right ear, and prior to the pain starting, he heard a bug-like sound. He has moderate pain (4/10), which doesn't interfere with work when he is concentrating on a task. When he is not distracted, the pain is constantly present. Nothing makes the pain better or worse. Although he has loss of smell, he can taste his food.

### OBJECTIVE

The patient appears to be in good health for his age and environment. He's always in good spirits and maintains eye contact during the interview. He is often joking with the other patients in the room while waiting his turn for treatment.

An initial right ear examination with an otoscope shows a purulent and inflamed tympanic membrane. The entire membrane is ringed with redness with bright red streaks throughout it. There is pus along the superior border and the entire tympanic membrane is severely scarred and cloudy. The left membrane appears normal and healthy.

A strong smelling substance, called Tiger Balm, is held under the nose while the patients eyes are closed. He reports that he is unable to smell it. Both sides of the nose are checked by holding the balm under one nostril while the other is plugged. Anosmia appears to be bilateral.

Hearing loss is checked by using a 128 hz tuning fork. Patient reports that he is able to hear the sound until it is 6 inches away from the right ear. The left ear is also checked. He can hear it until it is 1 foot from his ear.

Pulses are wiry, slippery and rapid, especially in the Liver position. Tongue shows a pale center with red sides and a greasy yellow coat.

### ASSESSMENT

**DX:** Severe, right-sided ear infection with anosmia and auditory deficit

**TCM DX:** Damp-heat in the Triple Burner and Gallbladder channels

**PROGNOSIS:** Using oral antibiotics, herbs, antibiotic ear drops and acupuncture, a complete recovery from the ear infection is expected. With the treatment of the ear infection, there is a possibility the



patient may recover his sense of smell, but the outcome is uncertain. Due to the severe scarring of the right tympanic membrane, full recovery of hearing is unlikely.

### INITIAL PLAN

Treat with acupuncture and herbs 3 times per week for 10 treatments before reassessing. Include western pharmaceuticals, such as oral antibiotics and antibiotic ear drops, to clear heat and reduce inflammation.

Focus on clearing dampness and heat in the Liver, Gallbladder and Triple Burner channels.

Typical acupuncture points include: GB20, R-TB17, GB43, TB2, TB5, GB40, GB34, LV3, LI4, ST36, SP10, LI11

### CONTINUING TREATMENT

Initial treatment: Includes oral antibiotics of amoxicillin 3TID for 5 days plus Huang Lian Jie Du Tang 3TID for 6 days

Treatment 4: It was determined that the pus was reduced by 75%. Therefore, the patient was switched to Long Dan Xie Gan Tang 3TID.

Treatment 2-9: External solution was made of 1 Huang Lian Jie Du Tang pill, crushed and mixed with rubbing alcohol. 15 drops of this herbal solution was dropped into the patient's right ear after his acupuncture treatment.

Treatment 9: It was determined that the patient had plateaued. Therefore, the external herbal solution was discontinued, and

antibiotic ear drops at a dosage of 3 drops TID, administered by the patient, was added.

Treatment 12: Due to the significant reduction in the patient's symptoms, the herbal formula Long Dan Xie Gan Tang was discontinued. The patient continued the use of antibiotic ear drops for 2 more weeks.

### **OUTCOME**

After 12 treatments, the burning sensation was reduced by 80%. Patient reported a constant, mild burning and itchy sensation deep inside the right ear, but it no longer felt like he had a 'fire' in his ear.

His tinnitus and temporal headache still came and went, but he also had hypertension, which could be contributing to these symptoms.

Objectively, the tympanic membrane improved by 90%. It was no longer purulent and the redness was concentrated to the upper right quadrant of the membrane. There were no longer streaks and the redness had changed from bright to dark red and looked like a scab.

There was no change in the hearing loss, though the patient was seen talking on his cell phone with his right ear. He was able to make out what people were saying if the phone was held close to his ear. There was no change in the anosmia.

### **CONCLUSION**

By week 10, the patient's visits were reduced to 2 times per week. He seemed much less concerned about his head/ear pain and asked to work on other conditions. The patient is using antibiotic ear drops during a 3 week break from treatment and his condition will be reassessed when the new team of practitioners arrive.

This case demonstrates the importance of understanding how to use diagnostic tools, such as an otoscope, in the treatment of certain conditions. This is especially relevant in Nepal where the acupuncturist is often the patient's primary care physician. The diagnosis and objective observation of an inflamed tympanic membrane provided a clear picture of the patient's presenting symptoms, guiding the treatment plan. The use of Chinese herbs, in conjunction with western pharmaceuticals, greatly improved the outcome.

## CASE STUDY: Low Back Pain with Radiation

Sarah Richards LMT

### OVERVIEW

30-year-old male presents with severe back and left leg pain, exhibiting postural deviation as a way to relieve pain from an L5/S1 disc herniation. When prescription of daily acupuncture and massage was followed diligently, patient experienced a more dramatic reduction in pain, improved posture and attitude.

### SUBJECTIVE

30-year-old male patient presents with severe back and leg pain on left side, with severe postural deviation to relieve pain. Symptoms began 7 months ago with no known cause. Patient has, however, throughout his life, carried heavy bags of rice on his back and head. He complains of sharp pain and stiffness with movement, when standing from sitting or squatting and when walking up stairs. Sharp pain wakes patient at night with movement of left leg or twisting to turn over.

After getting an MRI patient is told that he has a “compressed bone” in low back, but does not know the specifics. He expresses his desire to delay or avoid surgery for his condition.

Pain medication does not provide any relief, and he intentionally stands “crooked” to alleviate severe pain in his low back, but then tries to over-correct in order to look “normal.” He denies experiencing pain or discomfort in upper back or neck. (See photos)

### OBJECTIVE

An MRI taken 15 weeks ago appears to show L5/S1 disc herniation with L4/5 disc desiccation, as reported in radiology report. Visual observation of the torso shows lateral curvature of the spine and depression of the left scapula (see photos). When not weight-bearing, lying on massage table prone or supine, spinal curvature corrects to more normal alignment and shoulder blades relax in neutral position.

While standing, and asked to actively straighten his spine, patient feels pain in lower back on the left side with radiating pain in the left lower leg. Trunk flexion produces pain when patient’s fingers are 8 inches from the ground, with pain felt in lower back on the left side with radiating pain in the left lower leg. Trunk extension produces pain in low back only, without radiation, and a left straight leg raise elicits pain at 45 degrees. A left side bend test produces pain in low back, with tingling and radiating pain to lower leg while right side bend elicits no pain.

Mood changes are noticeable and vary depending on level of pain each day, ranging from sullen and angry to hopeful and excited.

### ASSESSMENT

**DX:** L5/S1 disc herniation with L4/5 disc desiccation causing severe lower back pain with radiating symptoms to left lower leg

**PROGNOSIS:** In order to have a long-term positive impact on the patient’s condition, it will likely require frequent treatments for many months. Since the patient travels more than 1 hour to the clinic, often by foot, it is improbable that compliance to a long-term, daily treatment plan is realistic. Consequently, a significant long-term result is doubtful.



### INITIAL TREATMENT PLAN

Daily acupuncture and massage therapy focusing on pain relief for 10 treatments before reassessing.

Typical massage tx: 30-40 minute sessions focusing on releasing fascial and muscular restrictions to reduce compressive forces on affected disc and nerve root, thereby decreasing pain and inflammation giving the disc a chance to heal, and allowing the patient to stand with proper alignment and return to work and regular activities.

### OUTCOME

After 14 acupuncture treatments and 11 massage sessions, patient reported mixed results based on frequency of care. Missing only 1 day of massage or acupuncture did not produce a significant set back. However, there was a 5-day break in co-treating, in which the patient received only 3 acupuncture treatments, no massage therapy and experienced a decrease in progress. Subsequently, after missing massage appointments 5 days in a row, the patient returned complaining of an increased pain level; a level similar to which he had been experiencing prior to beginning treatment, stating a pain level of 6 out of 7. Upon returning to the subscribed daily treatment plan, after only 3 treatments consisting of both modalities on the same day, patient reported improvement of low back pain from 6 down to 4, as well as an improvement in posture and mood. As seen in the before and after photos, the change in posture was significant. These pictures were taken immediately following an acupuncture treatment.

Massage techniques that provided the most relief and change for the patient include friction to address bilateral, lumbar paraspinous and erector spinae musculature, compression and friction of the sacral origin of gluteus maximus, tensor fasciae latae and quadratus lumborum (QL). Fascial release to the thoracolumbar region, utilizing flexion of low back in child’s pose (a pain-free position for this



patient) proved to be particularly helpful and was thought to be most productive by the patient. In addition, while in child's pose, having the patient flex laterally allowed access to the transverse processes insertion of QL. In a side-lying position, inferior distraction of the left ilium provided significant and immediate relief to patient. Passive stretching of the left side body, including obliques, QL and latissimus dorsi while patient was supine, added to the ability of the patient to stand taller and straighter.

It is interesting to note that by working primarily on the painful left side, his posture improved and pain decreased more quickly and efficiently than by working primarily on the right side or more bilaterally. (See photos)

Patient was advised to avoid twisting movements and carrying heavy objects. He was also counseled that creating lasting reduction of pain would take many treatments. In order for treatment to have a chance to help him avoid surgery, he will need to take it easy and not push himself to do heavy work, even once he starts feeling better, allowing the tissues time to heal.

### CONCLUSION

Unfortunately, more data could not be collected in this case because the patient discontinued care after only 3 weeks of treatment in order to visit family. Had I been able to continue to treat this patient, I would add abdominal and psoas major releases. I would recommend a course of anti-inflammatory medication and add a component of self-care and education in order to avoid further or recurring injury to the disc.

With frequent visits, his acute symptoms responded to the co-treatment plan of daily acupuncture and massage fairly quickly - within 3 visits. The 2 modalities, combined, show more promising results than just 1 on its own. Overall, it is promising to see how co-treating, specifically with acupuncture and massage therapy, can have a positive short-term outcome on pain and posture associated with disc herniation.

BEFORE MASSAGE



AFTER MASSAGE



## CASE STUDY: Ischemic Cerebrovascular Accident

Emma Goulart LAc

### OVERVIEW

60-year-old male presents with sudden onset of motor deficit of right hand, tingling and weakness of right foot, as well as marked changes in function of glossopharyngeal and hypoglossal nerve. Within the course of 15 acupuncture treatments, including electric stimulation and moxibustion, there are marked improvements in motor function testing of right hand, a decrease in sensation of tingling and pain in right foot, reduced pain in the ball of right foot and a cessation of headaches.

### SUBJECTIVE

Patient is a 60-year-old male who presents with compromised motor function in right upper limb. The onset of symptoms started 7 months ago, reaching maximal deficit over a half hour period, affecting the right upper and lower limbs. There is suspected glossopharyngeal and hypoglossal nerve involvement due to changes in throat and tongue function.

At his hospital visit, he was diagnosed with left-sided ischemic stroke, prescribed 6 different medications, as well as shown several physiotherapy exercises to do at home.

Prior to his stroke, he had no symptoms of dizziness, pain in the chest, nausea or vomiting, nor any other abnormal signs. Patient was actively being treated for hypertension prior to stroke.

The patient is mostly concerned about his right hand, since it is preventing him from being able to work. Most of his frustration is due to the loss of control of movement in his right hand. He also mentions right leg weakness and slight tingling and pain on the dorsal aspect of the foot. Further questioning reveals the feeling of weakness is caused by painful knotting on the ball of his foot.

Since the incident he has had more difficulty speaking, which he describes as a tickle in the back of his throat. This sensation in his throat came on during the stroke along with the loss of motor function in his right hand. He notes short-term memory impairments since the incident, described as an inability to remember details.

Patient is currently taking 4 medications: Amlodipine, Clonazepam, Aspirin and Atorvastatin.

Bowel movements are formed, but feel incomplete and are difficult to pass. Normally he passes stool daily, though he can go up to 3 days without a bowel movement. Patient reports scanty urination. He sleeps through the night, usually getting between 7 and 9 hours per night. He reports feeling cold inside, especially on fingers and toes. He does not perspire, no matter the level of exertion. He experiences occipital headaches regularly, and relates them to his high blood pressure. His eyes burn and feel irritated.

### OBJECTIVE

Patients overall health is above average for age and environmental factors. He appears strong constitutionally, with a demeanor that is generally quiet. He seems hopeful of the acupuncture treatments and open to any way in which he can participate in the process, including a dedication to coming for treatment daily.

Hospital records from June 2012 (7 months prior to treatments), are from 3 weeks after the incident. A CT scan was administered, showing evidence suggesting ischemic stroke. The carotid doppler report was



normal, as was lipid testing. The color doppler echocardiography report showed aortic valve and mitral valve thickening. The mitral regurgitation grade was II-III. The tricuspid regurgitation grade was II. Fair left ventricular systolic and diastolic function. Right upper limb testing showed flaccid tone, power of 0/5 and hyper reflexion. However, all other limbs received normal scores.

Upon arrival to our clinic, several tests are undergone to assess patient.

Facial testing:

Sharp/dull test: No clear findings along trigeminal nerve pathway; He is able to feel light touch bilaterally on face, though sharp/dull testing is inconsistent along his right side.

Facial nerve testing is inconclusive. Expressions are all normal. He is able to raise his eyebrows, close his eyes and grimace. However, his smile appears slightly slanted down on right side.

Glossopharyngeal nerve testing is inconclusive. Speech is normal when saying O, La and Cha, though he has trouble saying E. Patient is constantly clearing his throat while talking, and has asked for water on multiple occasions due to dryness.

Hypoglossal nerve deficit is positive with a deviated tongue.



#### Right Upper Limb:

Sharp/dull test: Shows sensory deficit distal to wrist joint. Patient is unable to distinguish between sharp and dull in this area.

Full AROM in both shoulder and elbow joints bilaterally. On the affected side, his wrist function is compromised with extension at 30 degrees and flexion at 70 degrees. Additionally, 1st to 4th fingers slant 30 degrees laterally.

Isolated finger extension: 0/5 in 3rd to 5th digits, with no movement at all; 2/5 in 1st and 2nd digits, with minimal movement, but not against gravity; Isolated finger flexion - 3/5 in all fingers with movement against gravity, but not against resistance

Grip strength is roughly 30% weaker on the right side; Wiggling fingers - 3/5

Vitals: Blood pressure is 160/90.

TCM: Tongue is deviated, overall sticky white coat, yellow at root; Scalloped edges with red body on sides

Pulse on right is thin and wiry. Left is full and surging, but weak in chi position.

#### ASSESSMENT

DX: CT scan taken 3 weeks after incident shows evidence of left ischemic CVA. These medical results, combined with a decrease in motor function of upper right limb, and a notable change in throat and memory impairments, meet criteria to confirm diagnosis given by hospital of left ischemic CVA with right hemiparesis.

TCM DX: Blood stasis pattern causing blockage of channels and collaterals resulting in internal wind; Underlying Liver yin deficiency causing Liver yang to rise

PROGNOSIS: At initial consultation, patient had already regained motor and sensory deficits since his hospital visit 7 months prior. Due to these changes, combined with patient's strong constitution and dedication to physiotherapy exercises, further recovery seems promising. It is hopeful that acupuncture and physiotherapy exercises will continue to aid successful management of motor and sensory deficits, though full neurological recovery may not be possible.

#### PLAN

Treatment principles: Move blood stasis, open channels and collaterals, and nourish the Liver yin.

Treat with acupuncture 6 days per week for 10 treatments before full reassessment. Long-term treatment, however, is likely needed 3 days per week. Treatment approach is to open right-sided Yangming and Shaoyang channels, unblock qi and blood in collaterals. Scalp points along primary motor cortex on left side to stimulate right-sided motor function, occasionally with electric stimulation. Local points on right side around affected area of mouth and throat to stimulate affected nerve pathways.

Typical treatment: Bilateral treatment: LI4, LV3, DU26, REN23, REN24, DU15, DU16; Right-sided: GB34, Ba Xie and Ba Feng, electric stimulation between LI12 and LI4, LI11 and SJ3, UB60 and LV3, GB40 and GB43. Needling along the motor cortex line on left side of head, roughly between DU20 and GB6. Most treatments consist of stick moxa along his right metacarpalphalangeal joints to open blockage in channels and collaterals.

Additional physiotherapy and coordination exercises are provided for at-home treatments: Making a fist and opening it for motor function, touching thumb to each finger to improve coordinated motor function and touching hands behind back and above head for proprioception. Patient is sent with a moxibustion stick to use for warming the Yangming and Shaoyang channels on his right hand.

#### OUTCOME

The patient came almost every day that the clinic was open for 4 weeks, even though his home is an hour and a half away. There was significant visible progress, over the 4 weeks of acupuncture treatment and physiotherapy exercises, of the motor function in his right hand.

After the 2nd treatment, he reported an increased ability in moving his right fingers, noticeable while getting dressed and tying his shoes.

After the 8th treatment, during our 2nd week, there was marked improvement in isolated finger extension. He presented at 4/5 rating on all digits except the 4th, having the ability to maintain position against gravity and against minimal applied resistance. His 4th digit, at 2/5, was unable to move against gravity. This was a great improvement from 0/5 on his first visit to the clinic 2 weeks earlier. Additional new testing was done on his 8th visit. Touching each finger to thumb - movement was slow, though possible on all fingers except his thumb to 5th digit.

At treatment 10, a reassessment of sharp/dull testing on the affected hand was normal, aside from his 1st finger, which had unclear results, showing some areas with lack of sensory function. This was an improvement from his 1st visit, which showed sensory deficit distal to wrist joint. Overall, he felt that there had been improvements in movement of fingers. His main concerns at our re-evaluation were his persistent headache and the stiffness he feels in fingers of affected hand.

At treatment 15, patient felt positive about his hand, though he noted swelling in his 3rd and 4th digit at 2nd interphalangeal joints. The area of tingling on his right foot had decreased by 50%, and the pain on the ball of his foot was intermittent. Testing touching thumb to fingers was the same as our testing at treatment 8, with an inability to touch thumb to 5th digit.

## **CONCLUSION**

Patient sought acupuncture 7 months after his stroke and within 15 treatments saw marked improvement in motor function of his right hand, as well as further sensory function in right foot. His headaches subsided within the last 3 treatments. The patient was advised to come 3 times per week for another month, with the hope of continuing to improve motor function. This will hopefully maintain a slow and steady improvement, aiding in his recovery. It is unclear whether the acupuncture will allow full recovery of motor function of his right hand. However, it can certainly be a means for managing the deficits caused by the stroke.

## CASE STUDY: Facial Paralysis (Bell's Palsy)

Joey Chan BHkin Dip AOMj RAc

### OVERVIEW

A 50-year-old female with Bell's palsy presents with hemi-facial paralysis involving the eye and the mouth. After 5 weeks, 10 acupuncture treatments and 2 months of Chinese herbal medicine, she experienced a 90% recovery.

### SUBJECTIVE

Patient is a 50-year-old female presenting with right side paralysis of the face involving the forehead, eyes and mouth. The paralysis developed suddenly, 1 week prior to her first consultation at the clinic. Patient recalls having a low fever and chills for 3 days, with a slight sore throat and cough. On the 4th day, she woke with hemi-facial paralysis marked by an inability to close her right eye, with additional tearing and swelling of the right eye. She reports she has not slept at all for 7 days because her affected eye will not close. Patient describes symptoms of forehead pain and tightness, which can lead to twitching of the eye during severe pain. She also reports eye twitching when she is in a cold environment.

She experiences constant vertex and occipital headache, described as deep and moving pain, in addition to sharp pain behind the right ear. The left side of her mouth is being pulled and is tight, while the right side of the mouth is painful. She describes her face as being numb and drying up. She also feels chills and dizziness, usually in the morning and evening. She states that her overall body temperature alternates between hot and cold, though her hands and feet always feel cold. She reports her energy is very low, her body feels heavy, and she has no appetite. She is losing her sense of taste. She states that there has been no improvements since the incident and she has not seen any other health care providers.

### OBJECTIVE

Patient appears to be weak and has low energy. She is thin with her cheekbones protruding. She talks in a quiet and slow voice. She looks tired and her eyes are always looking down. The right side of her face is expressionless and the left side is tight. The patient's right eyelid droops down covering  $\frac{1}{4}$  of her eye. The patient's right eyebrow and eye is asymmetrical to the left, with the right side sitting  $\frac{1}{4}$  inch lower than the left side.

Facial expression tests of the seventh cranial nerve consist of blinking the eyes, closing the eyes, wrinkling the forehead, smiling and frowning. When tested, patient is unable to close her left eye or blink. She can only close the eye  $\frac{1}{4}$  of the way. The patient's right forehead does not wrinkle when compared to the left side. The patient refuses to smile and frown when asked. Sharp/dull sensory test shows lack of differentiation on the right side of the face. Motor facial tests of saying the sound "E" and "O" show asymmetry of the mouth. Saying "A" is symmetrical.

Patient's demeanour appears low and her eyes dull. Her face color is dark and dull and her nails are pale. Her tongue is dry with a red heart tip, white coat and a quiver. Her pulse is deep and weak and very faint on the right.

### ASSESSMENT

DX: Asymmetrical facial expressions of the right side of the forehead, eyebrows, eye and mouth and the loss of taste shows that the seventh cranial nerve is affected, leading to the diagnosis of Bell's palsy.

Damage to the orbicular oculi is shown from the lack of passive eyelid movement. Occipitalis and frontalis muscles responsible for lifting the eyebrows and wrinkling the forehead are also affected. Mentalis, risorius, levator labii superioris and depressor labii inferioris damage is seen from the asymmetrical facial expressions of saying E, O and smiling.

Damage of the seventh cranial nerve affects the taste sensory of the anterior  $\frac{2}{3}$  of the tongue.

TCM DX: External wind-cold attack of the Bladder Taiyang channel leading to blockage in the Bladder Taiyang and Stomach Yangming channels, with underlying qi and blood deficiency and dampness from Spleen qi deficiency

The patient's symptoms began with a wind-cold attack, presenting with fever and chills, slight sore throat and cough. The wind-cold entered the Bladder and Stomach channels of the face, leading to wind invasion and blockage of these channels. Wind-cold symptoms shown are vertex and occipital headache around BL10, pain at SJ17 on the right side, twitching of the eye that is worse in a cold environment, and a quivering tongue. Blockage along the Stomach and Bladder channels on the face is shown by hemi-facial paralysis and lack of sensation on the face.

Qi and blood deficiency signs and symptoms are fatigue, poor appetite, dull eyes, dull and dark facial complexion, pale nails, numbness of the face, dry tongue and a deep weak and faint pulse.

Dampness signs are shown on the tongue with a white coating, as well as a heavy feeling in the body.

PROGNOSIS: Patient seeks treatment at this clinic 1 week after onset of initial symptoms. Improvement is more likely due to early diagnosis and treatment. Significant improvement may be possible with a course of 10 acupuncture treatments and 2 months of Chinese herbal medicine.

### PLAN

Treatment principle: First expel wind-cold and then tonify Spleen qi and blood and resolve damp.

Treatment: Acupuncture 2-3 times per week for 10 treatments before re-evaluating; Herbal treatment for 2 months

Treatment approach is to expel wind-cold in the Bladder Taiyang channel, treat locally on the face to unblock channels, tonify qi and blood and resolve damp.

Typical treatment: BL2, BL10, GB8, ST4, ST5, ST6, DU14, DU20, SJ17, Yu Yao, SP6, ST36, LI4. Other points included are ST40, SJ5, SI19, SJ23, DU16, GB2. A technique of pulling the drooping eyelid up prior to needling is used. Local eye and mouth points are used on the right side. Electro-acupuncture is used on the face from the eighth treatment onwards when she had more qi and blood to support stronger stimulation. The electro-acupuncture setting is 100/2 hertz with mixed macro amp for 20 minutes. Typical electro-acupuncture points connect SJ17 to DU16 and ST3 to ST5.

Jing Fang Bai Du San and Chuan Xiong Wan are given for 2 weeks to expel wind-cold. Jing Fang Bai Du San tablets are given for 3 days, TID. Then Chuan Xiong Wan tablets are given for 11 days, TID.

The formula is then switched to Gui Pi Wan for 2 weeks to tonify qi and blood. Xiang Sha Liu Jun Zi Tang is given for a week, afterwards, to tonify Spleen qi and move damp. 3 weeks of Yu Ping Feng San is given after the last acupuncture treatment to tonify wei qi.

Patient is advised to eat more meat, egg or alternative protein in order to increase her energy, qi and blood. Patient is also advised to do facial exercises of saying "A, E and O."

## OUTCOME

At the fourth consultation, the patient reported that there was no more pain in her forehead, with only an occipital headache. Her sense of taste returned. She reported not feeling the needles on the right side of her face during the initial treatment, but could now feel the needles.

Her demeanour and energy appeared much better. Her eyelid drooped down to cover 1/8 of her eye and she was able to close her right eye ¾ of the way. She was finally willing to show her smile. It was asymmetrical. The right side of her mouth was still expressionless and the left side tight. The patient could now differentiate between sharp/dull sensations on the affected side. The patient's tongue had a red tip, thick white coat and no tremor.

From treatment-to-treatment, there was considerable improvement. There were visible improvements of the eye and mouth. With each visit, she had more strength in her voice, and color in her face.

On the eighth treatment, she asked if she could discontinue treatment since she felt 80% better. Her eye and forehead had the most significant improvements, though the patient's mouth was still asymmetrical. Her pulse was weak, but stronger than before.

She was advised to come for the full 10 treatment since she was not fully recovered. At the tenth treatment, all tests were performed and an improvement was shown in all the tests. The patient could close her eyes fully and blink properly. Facial expressions of raising the eyebrows were symmetrical. Sharp/dull sensory tests showed the same sensations on both sides. Motor facial tests of saying the sound "E" and "O" showed slight asymmetry of the mouth. Patient reported a good appetite. She was sleeping 9 hours per night without interruption, she had more energy and her body felt lighter. There was slight pain behind the right ear and the left side of the mouth was slightly tight.

After 10 acupuncture treatments, she was not able to come anymore. Therefore, 3 weeks of Yu Ping Feng San was prescribed.

## CONCLUSION

This patient showed rapid improvement from acupuncture and herbal medicine for Bell's palsy. She showed a significant improvement from acute Bell's palsy with herbal medicine and 10 acupuncture treatments 2-3 times per week for 5 weeks. The patient was given 3 weeks of herbal medicine to boost her immune system after her 10th acupuncture treatment. For this patient, 20 acupuncture treatments would be a more appropriate course of treatment. 90% recovery was shown with 10 treatments. If recovery is to follow the same course, full recovery may be possible at 15 acupuncture treatments; and 5 more treatments after to strengthen her immune system. This case demonstrates that with early diagnosis, and continuous and frequent treatment of acute Bell's palsy using acupuncture and Chinese herbal medicine, significant results are highly possible.



3rd treatment - eye closed half way



8th treatment - eye closed with no gap

More color in face, more energy, gained weight



6th treatment - saying the sound "E"



10th treatment- saying the sound "E"

## CASE STUDY: Ankylosing Spondylitis

Lindsey A Thompson MAcOM EAMP LAc

### OVERVIEW

25-year-old male presents with low back and sacroiliac pain, beginning approximately 15 months prior to consultation at this clinic, for which he had received a diagnosis of ankylosing spondylitis at a hospital in India. After 18 treatments with acupuncture in conjunction with moxibustion and cupping therapy, the AROM of the back, and degree of pain, significantly improved.

### SUBJECTIVE

Patient is a 25-year-old man presenting with low back and sacroiliac joint pain. The pain began after an injury to the low back approximately 15 months prior to consultation at the clinic. The injury was reported at the initial consultation, which was performed by a different practitioner. Pain is worse with cold and stress, while improved with heat, massage and yoga. The location of the pain is in the low back, sacral region and the mid- to upper back. On the initial visit, pain severity is reported at a 4/10 with pain medications, and at a 7/10 without medication using the globally accepted NRS-11 rating system. At its worst, the pain can be so severe that it interferes with all daily activities and breathing. This is a 7+/10 on the NRS-11 scale and concurs with the patient's self-reporting. Pain is worse at night, making it difficult for the patient to sleep.

Patient previously sought care at a hospital in India on April 9, 2012, where he underwent laboratory exams, including a c-reactive protein assay and radiographic imaging. The patient was given Indomethacin, an NSAID, to take 50mg QD when pain is at its worst. At the initial consultation, patient is taking the prescribed daily dose.

### OBJECTIVE

Patient's overall health seems to be above average for environment in Nepal. Patient is of slight, lean build, with a cheerful and hopeful demeanor. He is a pre-med student in his 4th year and has a great deal of mental stress revolving around school.

Patient brought in radiographic imaging of the lumbar spine and pelvis taken from anterior to posterior view. The x-ray shows calcification of the anterior and posterior longitudinal ligaments of the lumbar spine with bilateral sacroiliitis. Both of these findings are suggestive of AS. The imaging also shows a reduction in bone density. The image shows normal hip joints.

Examination of the area of purported pain with palpation shows the location of the pain limited to the sacroiliac joint and the lower vertebrae of L4, L5 and S1. Pain at L4, L5, S1 is elicited with moderate to mild pressure. Palpation of the spine demonstrates hardening between the vertebrae of the lumbar and sacral spine in concurrence with the calcification of the longitudinal ligaments shown on x-ray. Lumbar lordosis is reduced with significant flattening of the lumbar spine. Palpable tenderness is felt in the erector spinae, quadratus lumborum (QL) and trapezius muscles. Muscles are hard and rigid upon palpation.

Examination of the active range of motion (AROM) of lumbar spine on initial visit is significantly affected. Patient demonstrates 30 degrees



Bamboo spine in a patient with ankylosing spondylitis.  
Image: Wikimedia Commons

flexion of lumbar spine, 10 degrees extension, 45 degrees rotation and 10 degrees lateral flexion.

### ASSESSMENT

**DX:** Initial blood analysis taken at the hospital in India in April 2012 tested positive for c-reactive protein at a value of 12mg/L. A normal level of c-reactive protein is considered <6 mg/L. C-reactive protein is sometimes elevated in patients with active AS. The radiographic imaging that shows bilateral sacroiliitis, calcification of the lumbar anterior and posterior longitudinal ligaments, and the inflammatory back pain worse at night are all considered diagnostic for ankylosing spondylitis. This method of diagnostics is based on the modified New York criteria for AS, as laboratory testing can be inconsistent with AS. The modified New York criteria is as follows: The patient must have radiographic evidence of sacroiliitis and one of the following: 1) restriction of lumbar spinal motion in both the sagittal and frontal planes 2) restriction of chest expansion, adjusted for age 3) a history of inflammatory back pain. The determining factors for inflammatory back pain include onset of pain at < 40 years of age, morning stiffness, improvement with activity, and duration of > 3 months of pain. Since the patient is presenting with 2, possibly 3 of the New York criteria, along with radiographic evidence of sacroiliitis, the patient meets the diagnostic criteria for ankylosing spondylitis according to the Merck Manual.

**TCM DX:** Liver qi stagnation with wind-cold-damp bi syndrome, cold predominant in the Governing Vessel and Bladder meridians

**PROGNOSIS:** Due to the presence of calcification in the lumbar anterior and posterior longitudinal ligaments, the prognosis is guarded. Acupuncture will not reverse the pathological tissue changes that have already occurred, but may effectively increase flexibility and decrease pain. Successful management of the



inflammatory process in the lumbar and sacroiliac joint may prevent or slow further pathological damage to the spine and surrounding tissues.

## PLAN

Treatment principles: Dispel wind, resolve damp, disperse and warm cold, move Liver qi and strengthen the Governing Vessel; Invigorate qi and blood.

The treatment plan is to treat with acupuncture for 2 to 3 times weekly with reassessment at the 10th and 20th treatments. Treatment approach is to use Shaoyang channels to dispel wind and dampness and open up the belt channel (Dai Mai).

The back-shu points for the 6 yin organs are utilized on the Bladder Taiyang channel to nourish blood, yin and the 6 yin organs. The Taiyang channels are also utilized to move qi and blood throughout the back. Points to strengthen and move qi through the Governing Vessel are also used to promote proper bone development in the spine.

Typical treatment: TW5 and GB41, SI3 and BL62 needled contralaterally to activate the belt and Governing meridians, along with bilateral BL58

Alternate treatment: Hua Tou Jia Ji points for L3,4,5 and S1 to move qi and blood through the local spine, or a selection of the following back-shu points: BL23, BL20, BL18, BL14, BL13 to nourish the respective yin organs associated with each back-shu point; These points are used to build qi and blood, nourish the spine via the Kidneys, calm the shen and move Liver qi and Liver blood. Tiger warmer moxa or direct moxa is applied to the SI joint and along the QL muscle, and occasionally the lumbar and sacral spine to disperse cold and warm the channels. Acupuncture and moxa treatment is followed by cupping of the mid- and upper thoracic spine.

For the 1st 2 months of treatment, the patient also received a weekly massage.

## OUTCOME

At the 3rd treatment, the patient reported a 60% improvement in back and neck pain. He also had no stiffness upon getting off of the treatment table. At the 7th treatment, the patient reported a decrease in pain medications, but did not quantify the degree of decrease in medication. Between the 7th and 11th treatments, the mid- to upper thoracic muscle pain and QL muscle spasms fluctuated. At the 11th consultation, the patient reported that back pain was much improved and he was noticing an increase in flexibility. The patient also reported reducing the dose of 50 mg Indomethacin from a daily dose to only 1 50mg pill in the last 7 days.

The patient's lumbosacral AROM was reassessed at the 13th and 22nd consultations. At the 13th consultation, lumbar flexion was 80 degrees, extension 15 degrees, lateral flexion 5 degrees and spinal rotation was 45 degrees. At the 22nd consultation, lumbar extension measured 40 degrees and lumbar flexion measured 85 degrees. Lateral flexion and spinal rotation were neglected in the reassessment. AROM at the initial consultation was 30 degrees flexion of lumbar spine with 10 degrees extension, 45 degrees rotation and 10 degrees lateral flexion.

Normal degrees of lumbar flexion are 60 degrees, extension 25 degrees, lateral flexion 25 degrees, rotation 30 degrees. At the 22nd consultation, the patient was well above normal degrees of AROM in extension and flexion. On the 13th consultation, the degree of rotation was above normal with lateral flexion still below normal and below that of the initial consultation. It is unfortunate that lateral flexion was neglected to be assessed at the 22nd consultation.

From treatment-to-treatment, the patient reported fluctuations of pain in the muscles of the mid- to upper thoracic spine and intermittent muscle spasms in the left QL. At times, the patient was excited about the increase in flexibility, but disappointed in the slow progress of his case. The patient also expressed disappointment in the frequent return of muscular pain in the mid-thoracic, trapezius and QL muscles. He would spend a great deal of time at a desk, studying, and in a high-stress environment with his medical pursuits in school. The patient typically studied until 3AM, only sleeping from 3AM to 9 or 10AM. The patient's lifestyle of prolonged sitting, poor ergonomics, late-night studying and stress were more likely to contribute to the frequent return of muscle pain and spasms in the mid- to upper back than to be a complicating factor of AS.

## CONCLUSION

The patient experienced significant reduction in pain and increase in AROM on the sagittal plane. It is therefore advised to continue treatment 1 to 2 times per week for the next 4 to 10 months. The increased AROM along the sagittal plane is particularly exciting because the patient developed AROM greater than normal AROM for the general populace. However, the patient lacked improvement along the frontal plane, and it is hoped that, with continued treatment, positive changes in AROM on the frontal plane will take place, as did those of the sagittal plane. The muscular pain of the mid- to upper back improved at each treatment, but each time, returned within a few days. The return of muscular pain was most likely related to the poor ergonomics, prolonged sitting and stress of studying for medical school and exams. The reduction in frontal plane AROM could relate to the frequent recurrence of spasms in the QL. Until the ergonomics of studying can be fully addressed, it is likely that muscles spasms will intermittently come-and-go.

At the time of writing this case study, the patient ceased treatment on his own accord, against advice of the practitioner. The patient had a month to study before taking his final examinations. The timing of his examinations may have caused the patient to temporarily cease treatment.

With a complicated illness such as ankylosing spondylitis, a normal course of treatment would involve 6 months to a year of regular acupuncture treatments. Given that the patient had such great successes in sagittal AROM in under 2 months, it is likely that the patient would receive significant benefit from a full course of treatment of 6 months to 1 year.

## CASE STUDY: Bilateral Leg Weakness and Paralysis

Jasmin A Jones MAcOM LAc LMT

### OVERVIEW

42-year-old female presents with an inability to walk due to slow-onset, partial bilateral leg paralysis occurring over a 15 year time span. After 23 treatments focusing on strengthening the DU and Kidney channels with acupuncture, electro-stimulation and moxibustion, the patient gained a significant degree of improvement in both sensory and motor function in her lower limbs.

### SUBJECTIVE

Patient believes her condition originally started 15 years ago while she was living in the mountains in freezing cold weather for a year and a half. Often, she would become so cold that her limbs would go numb. Symptoms started 12 years ago while she was 5 months pregnant with her second child. She had a difficult time walking up hills and would have to stop regularly because she was experiencing low back pain, and her whole body felt heavy, especially her left leg and arm. After the birth of her son, she considered seeking help for these symptoms because the severity was increasing and slowing her daily chores that she couldn't stop doing due to her responsibility to her family. Her strength progressively decreased over the next few years until she had to start using a cane to walk due to the weakness in her legs and arms.

Patient reports she had treatment from a Korean medical practitioner, which ended 30 days prior to beginning treatment at the Vajra Varahi Medical Clinic. Treatment consisted of massage with heat daily for 60 days, which according to the patient resulted in a significant recovery of strength in both arms.

She initially sought medical help 9 years ago. A complete x-ray, CT scan and MRI were performed at the Blue Cross in Kathmandu. Patient reports she misplaced the CT scan and is only able to produce her MRI reports, of which the attached paperwork is mostly eaten by rats.

She occasionally experiences cold hands and feet. Her urination and bowels are appropriate and regular. She sleeps easily with mild fatigue in the mornings. She has no headaches, dizziness or ringing in the ears. She has a 30 day menstruation cycle, with mild breast tenderness for 2 days prior, a 4-5 day flow, and dime-sized clots with no cramping before, during or after the cycle. Her vital signs are normal.

Patient also has a sharp, local pain, bilaterally, at the lumbosacral area, which rates a 7 in accordance with the standard NRS-11, and posterior knee pain, which rates at a 5.

### OBJECTIVE

Patient is about 5'5", 130lbs, with a happy-go-lucky attitude. When she speaks she has a sweet, high-pitched voice, reminiscent of a small child. She is extremely proud, not accepting any assistance in or out of the treatment room. She appears optimistic that acupuncture will help her.

At this time, she cannot stand on her left leg or flex from that hip or knee while walking, as it drags behind her while she walks. She can stand on her right leg, as well as flex the right hip about 5 degrees to take a small step, but has to gain momentum using a twisting, swinging motion and her upper body strength and gravity to kick



forward. Her legs tremble slightly while attempting to stand still.

Comparing the left leg to right, patient can feel light touch bilaterally on all dermatomes, with no differentiation between sharp/dull or hot/cold sensations from L5-S1 dermatomes, bilaterally, up to patient's knees.

While lying supine, she cannot actively flex, extend, adduct or abduct the hip, knees or ankles, bilaterally, or flex the abdomen to perform a sit-up. While seated, she can actively flex the knees 15 degrees, as well as extend the knees 45 degrees. Patient cannot wiggle toes bilaterally while seated or lying supine.

Active and passive range-of-movement is normal in the shoulders and elbows. Active wrist flexion is normal, with active wrist extension compromised at 5 degrees. All passive ROM in upper limbs is normal. Active finger movements are inhibited with the left index and middle finger, and right index finger flexion is decreased to 15 degrees.



Patient is also unable to straighten these 3 fingers. Grip strength is decreased by 50% on the left compared to the right.

Patellar reflex: 1+ bilaterally

Achilles reflex: 0 bilaterally

Testing passive proprioception of the big toe shows no differentiation between flexion or extension. Babinski test is unresponsive.

Pulse is thin and deficient on left, disappearing with strong pressure. Stronger on the right with a slightly wiry quality, especially in the middle position.

Tongue is thin, pale, especially in the center with red dots on the tip.

### ASSESSMENT

**DX:** The MRI performed by the Blue Cross of Kathmandu shows no evidence of inflammation or lesions in the brain or spinal cord or evidence of upper motor neuron damage. She was diagnosed with a probable primary demyelinating of L5-S1 nerve root, of which the cause is unknown. According to the Merck Manual, primary demyelinating disorders are suggested by diffuse or multifocal deficits, and demyelination should be considered in any patient with unexplained neurological deficits.

**TCM DX:** Kidney yang deficiency, cold stagnating the DU channel

**PROGNOSIS:** Due to the fact that she has been untreated for 12 years, it is unlikely this patient will fully recover from acupuncture alone. Being that this patient reports that she has recovered significant improvement in function of her arms with massage/heat alone 1 month prior to consultation at this clinic, it is hopeful that with acupuncture treatment, this patient will regain some degree of motor function in her lower limbs, as well as a decrease in the sensory deficit associated with her neuropathy. It is also hoped that she will experience some reduction in knee and back pain.

### INITIAL PLAN

Patient is to receive acupuncture 3-4 times per week, re-evaluating at treatment 20. Typical points include KD3 with UB58 with moxa to tonify the Kidney and warm the DU channel. UB40 to bring qi and blood to the knees, SI3 with UB62 to open the DU channel. Hua Tou

Jia Ji points from L4-S2 to KD 3 with electro-stimulation at 100hz continuous for 20 minutes to stimulate S1 nerve root.

Lower 1/3 of scalp motor points are used in the first few treatments with strong stimulation.

### OUTCOME

After 20 treatments, this patient reported being able to stand for a few minutes without a cane or leg trembling. She could also stand for a few seconds on her left leg and a few more seconds on her right leg compared to her initial presentation. Patient's back pain reduced to a 2 compared to previously being a 7.

She was able to slightly flex her left hip 5 degrees and extend the knee while walking, whereas before she had to swing her leg completely from the right hip to take a step. Her right hip was able to flex 30 degrees to take a larger step. No change in ankle flexion or dorsiflexion. Both knees became free of pain, and active global ROM became normal in the knee while seated.

Sharp/dull tests still showed no change in sensory deficit from the dermatomes L5-S1. However, patient reported being able to feel temperature changes in her first and second toes on the left side, as well as having gained more feeling in general in both legs.

### CONCLUSION

Even though it is unlikely that this patient will regain full strength in her legs again, it is recommended she continue acupuncture 2x weekly for at least another 2 months or until patient reaches a plateau. After 20 treatments with acupuncture, she has experienced a 100% reduction in knee pain, 90% reduction in back pain, and regained some ability to feel temperature changes. She has experienced improvement in strength and ROM in both legs. The patient feels lighter in her body. All of these changes add to the quality of her life. As a result of the improvement so far, it is quite possible she will continue to regain further sensory and motor function in both legs.

## CASE STUDY: Chronic Vomiting

Terry Atchley MAcOM LAc

### OVERVIEW

80-year-old male presents with vomiting 20 minutes after each meal for 2 years. At the time of initial visit, patient was vomiting undigested food and water several times per day. Other symptoms include burning esophageal pain, the feeling of constant hunger, and a sensation of "something stopping the food in his chest." Gastroesophageal Reflux Disease (GERD) and hiatal hernia are suspected causes of vomiting. Vomiting decreased after acupuncture treatments, herbal medicine, dietary changes and the addition of antacid therapy.

### SUBJECTIVE

80-year-old male patient reports vomiting 15-20 minutes after meals, burning esophageal pain and a sensation that "something is stopping the food" in his chest. He describes a feeling of fullness after eating, followed by nausea and vomiting. The vomit is watery and contains undigested food. Otherwise, no bloating or discomfort is associated with eating. The pain is a slow, achy sensation and better without food. There is a foul taste in his mouth before eating food, but he is unable to further describe the taste. The patient feels cold most of the time, with only minimal sweating with intense labor, and denies night and spontaneous sweating. Bowel movements are dry and difficult to pass, occurring every 2 days. Nocturia occurs 4 to 5 times per night causing the patient to wake frequently with difficulty falling back asleep. This often leaves him feeling weak and fatigued.

His secondary complaint is wheezing and shortness of breath. He reports a 1 year history of cough with easy-to-expectorate thick, white phlegm throughout the day and night. It is difficult for the patient to take a deep breath, and the wheezing becomes severe when walking. He describes a low-pitched gurgling in his throat during these episodes.

### OBJECTIVE

Patient appears gaunt and emaciated. Each rib is clearly visible, his cheeks are sunken, and his hips protrude. Due to a lack of muscle mass, the skin appears to be draped over the bone. The patient weighs 44 kg and is 162 cm. Body Mass Index (BMI) is 16.8, classifying him as underweight. Upon moderate depth palpation of his abdomen, he feels pain half way between the xyphoid process and the umbilicus along the midline, although no mass is palpable. His teeth have worn down enamel, but the gums are not swollen nor red. On auscultation of the lungs, crackling can be heard in the lower lobes and wheezing in the upper lobes with a respiration rate of 26 breaths per minute (normal range: 16-24). Pulse oximetry shows saturation of 92 percent (normal range 95). (NEED BP AND PR)

His tongue is dusky in color, tender in texture, with a thick, white coat in the center and back. The pulse is thin and soft.

### ASSESSMENT

DX: Gastroesophageal Reflux Disease (GERD), hiatal hernia or a peptic ulcer could be the cause of the vomiting.

The clinical presentation of GERD is heartburn, with or without regurgitation of gastric contents. GERD is a condition associated with the esophageal sphincter, as is a hiatal hernia. The hiatus is the opening in the diaphragm connecting the esophagus and stomach. A hiatal hernia occurs when the top section of the stomach slides



up above the hiatus, pressing against the esophagus. The patient presents with burning esophageal pain and regurgitation of stomach contents, which could be a sign of GERD or a hernia.

Peptic ulcers also present the same as GERD and they are difficult to differentiate without proper imaging. Because this patient's pain is worse with food it must be considered and empiric treatment is not successful a referral for an endoscopy is required.

TCM DX: Spleen and Stomach Qi Xu with Cold Invasion, Lung Cold Phlegm Accumulation, Kidney Qi Xu

The patient experiences spleen and stomach qi xu through epigastric discomfort, emaciation, distention after eating with a sensation of stuffiness in the chest, fatigue, and nausea. The vomiting occurs when food is eaten, therefore it is an external cold and not internal.

Lung cold phlegm presents with a cough with white phlegm, vomiting of watery fluids, and cold sensations. Given the nocturia of 4-5 times a night, kidney qi xu is also present.

**PROGNOSIS:** With lifestyle changes such as smaller meals throughout the day to decrease pressure on the weakened sphincter, antacids, herbal medicine and acupuncture, management of the symptoms is expected to have a moderate to significant response. A trial of 10 acupuncture treatments is recommended to assess changes. In the case of a hernia, the resolution is not expected. If significant improvement is not observed by the 10th visit, an endoscopy is recommended with possibility of surgery to repair a hernia.

### INITIAL PLAN

**Acupuncture:** Treat twice per week for 10 visits before reassessing. Focus on tonifying Stomach and Spleen qi, warm excess cold, disperse phlegm accumulation and tonify Kidney qi.

**Typical treatment:** PC6 (Neiguan), SP4 (Gongsun), CV10 (Xiawan), CV13 (Shangwan), CV6 (Qihai), LU1 (Zhongfu), LU5 (Chize), KI7 (Fuliu), KI3 (Taixi), ST36 (Zusanli); Pole moxa along CV channel of abdomen, ST36, SP4 and LU1

**Alternate treatment:** BL20 (Pishu), BL21 (Weishu), BL23 (Shenshu), BL24 (Qihai), BL25 (Dachangshu), DU4 (Mingmen), KI3 (Taixi); Tiger warmer moxa is used on the back.

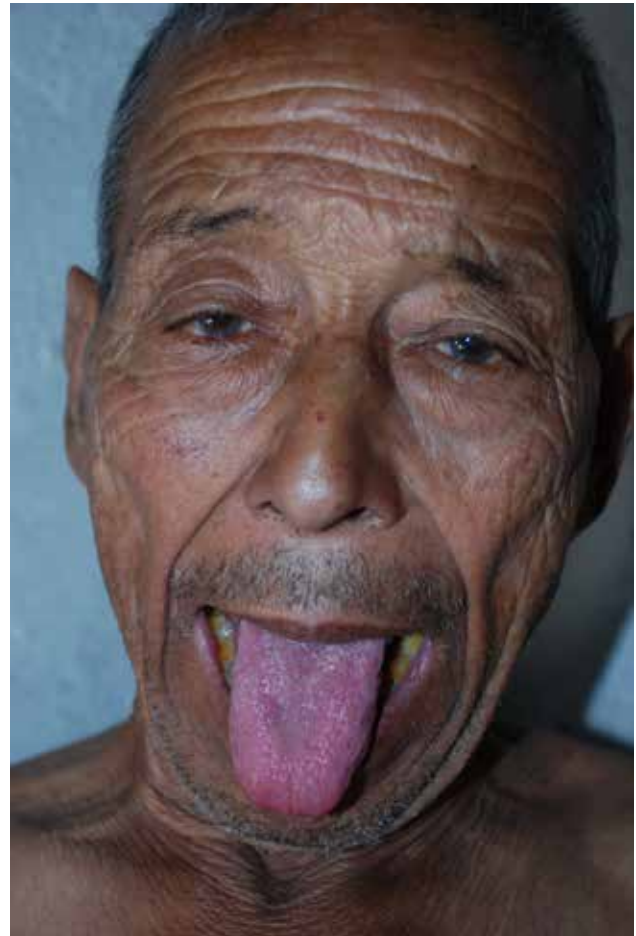
**Chinese Herbs:** Qi Pi Wan, 4g TID, is recommended for 5 weeks to strengthen the Spleen and Stomach. Qi Pi Wan contains the herbs: ren shen, bai zhu, fu ling, lian zi, shan yao, shan zha, chen pi, ze xie and gan cao.

**Other treatment:** The antacid Digene (magnesium trisilicate and aluminum hydroxide) is recommended to reduce stomach acidity and help with epigastric burning. 1 tablet is to be taken orally before eating meals. A proton pump inhibitor (PPI) is most often the first-line treatment when a patient presents with these symptoms. PPI's inhibit a mechanism which creates acidity in the stomach. However, a PPI is difficult to obtain in this remote village and Digene is free and available at the local health post. In this case, antacid therapy is preferred as an adjunct to acupuncture and herbal intervention, although a PPI may be reconsidered as the case progresses.

**Lifestyle recommendations:** Eat smaller meals more often throughout the day; Chew food thoroughly before swallowing; Sleep slightly elevated. Sleeping elevated will help with the GERD symptoms of burning pain by aiding in the descent of food through gravity.

### OUTCOME

After several treatments of acupuncture and adding Digene with meals, the patient reported that the vomiting and burning pain had been resolved. However, the vomiting returned the evening prior to the 5th treatment. Upon further examination, the patient reported he had been eating smaller meals more often, but was going to bed immediately after the last meal of the night. Patient was then counseled on eating meals at least an hour before laying down to reduce the possibility of stagnant food irritating the epigastrium. The patient reported good compliance with his medications and lifestyle recommendations. At the reevaluation (10th visit), the patient stated he could eat a normal-sized meal without vomiting, or sensation of



the food stopping in his chest. A reduction in respiratory symptoms was not observed. However, the patient reported an absence of the gurgling sound in his chest during exertion.

### CONCLUSION

The patient is responding well with lifestyle changes, acupuncture, herbs and antacids. Counseling the patient to continue with lifestyle changes could provide the most significant alterations in symptoms. If previous symptoms return, a PPI should be added to the treatment plan. Omeprazole dosed at 20mg PO QD for 4 to 8 weeks and then reassess the patient. If these methods of treatment continue to reduce and eliminate vomiting, future treatment should be focused on reducing respiratory complaints.

## CASE STUDY: Vaginal Discharge and Pruritus Vulva in a Patient with Type II Diabetes

Anna Helms BHSc (Acupuncture)

### OVERVIEW

63-year-old female presents with chronic purulent vaginal discharge, pruritus vulva and tingling in the extremities. Test results show hyperglycemia of RBS 540 mg/dl as well as vaginal candidiasis. Patient received 9 treatments of acupuncture, referral for insulin therapy, advice on diet and exercise, as well as Chinese herbs. With education, continued treatment and case management, she will be able to control her diabetes and prevent further candida overgrowth and complications.

### SUBJECTIVE

63-year-old female presents with white, foul-smelling vaginal discharge, for the past 3 years. Patient reports vaginal itching, which has increased in severity over the last month. She describes the area as 'burning' with small red and purple raised sores and no pus. Secondary complaints include blurry vision, red eyes, weakness in her limbs, some achy pain and tingling in both her legs and feet.

Patient feels thirsty, craves sweet foods, and reports an increased appetite for the last 2 years. She eats irregular meals, which usually consist of rice, green leafy vegetables, potatoes and dal bhat. She drinks milk tea with sugar a few times a day and drinks approximately 1.5 L water per day. After eating, the patient feels bloated with occasional nausea. Her energy levels fluctuate and she describes a feeling of a dry scratchy throat, especially in the afternoon. The patient experiences burning and dribbling urination at a frequency of 8-9 times per day and 3 times per night. The urine is described as cloudy in appearance. Her stools are daily, loose and often have a foul smell. She tends towards rumination and says she often wakes at night with difficulty falling back asleep.

### OBJECTIVE

The patient appears approximately 10 kg overweight with a large midriff. During treatments, she often dozes off for 2-5 minute intervals. In her treatments, lasting approximately 30 minutes, she yawns 4-5 times. Patient responds to questions with skeptical, distracted and short answers. Her extremities are cold to the touch and paresthesia is not detected with sharp/dull or soft touch tests. Her legs have a blue/purple tinge, with pronounced varicose veins in both shins with bruising medial to the tibial head (SP9) on her left leg. A random blood glucose test resulted in a reading of 258mg/dl (normal fasting blood glucose level: 80-120mg/dl). This was taken at approximately 3:30 pm, 3 hours after eating. BP 160/100.

Tongue: Pale/crimson body, dry, cracks in the Spleen/Stomach area with a yellow coat, which is thick at the root

Pulse: Slippery at the superficial level (especially full in the stomach position), but with underlying deficiency at the deep level

Recent patient-provided lab records show:

Vaginal swab culture: Candida species isolated

Fasting blood glucose: 218mg/dl

Postprandial blood glucose: 438mg/dl



### ASSESSMENT

**DX:** Pruritus vulva due to uncontrolled type II Diabetes Mellitus (DM) and vaginal candidiasis

Presenting signs and symptoms of DM, in this case, include increased thirst, appetite and polyuria. Sub-acute signs and symptoms of DM are lethargy, weakness, fatigue, visual blurring, pruritus vulva, and symptoms that come-and-go as plasma glucose levels fluctuate, with complications of tingling in the extremities (legs and feet).

**TCM DX:** Kidney yin deficiency with empty heat and damp from Spleen qi deficiency; Spleen qi deficiency signs and symptoms with damp include vaginal discharge, dribbling and cloudy urination, loose stools, bloating, nausea, over-thinking, bruising easily, sweet cravings, fatigue, vagueness, excessive weight especially around the midriff, slippery pulse and a pale tongue body with thick coating with crack in the Spleen/Stomach area. Kidney yin deficiency signs and symptoms with empty heat include dry scratchy throat in the afternoons, high thirst, burning urination, red/purple raised sores, red eyes, increased appetite, foul smelling stools, dry crimson tongue and a deficient pulse at the base level.

### PROGNOSIS

If the treatment plan is followed, the prognosis is good with full resolution of the candida infection. If the blood glucose is managed properly, the patient should see a general improvement in her overall health. In this case, patient compliance is very important to the overall outcome. If her blood glucose continues unmanaged, it is likely that the patient's condition will continue to decline, and a symptomatic approach to treatment will likely result in reinfection.

### INITIAL PLAN

Referral: Immediate referral to an endocrinologist for evaluation of hyperglycemia

Pharmaceuticals: Acidophilus (probiotic) capsules given for direct vaginal insertion 1QD for 10 days; Clotrimazole-candida-powder and sertaconazole nitrate vaginal cream applied topically BID for 10 days

Acupuncture: Treatments 2 times per week with a reassessment after 10 treatments; Treatment principles: Drain damp and clear heat (8 days with herbs), then tonify the Spleen and long-term tonify Kidney yin; Typical treatment includes LR5, ST36, CV12, SP6/9, SJ3, LI11, GB43, LR3, Yishu (Pancreas Back-Shu) and KD6.

Chinese herbs: Long Dan Xie Gan Tang, 8 pills TID for 8 days to clear damp/heat; Zhi Bai Di Huang Wan to nourish the Kidney yin and clear deficiency heat, 8 pills TID for 3 weeks

### OUTCOME

At reevaluation, the patient reported that the vaginal sores, discharge and itching had ceased. Urination had been reduced to 3 times per day and 1 time per night. Stool was more formed and she described her energy levels as more even. At this time, the patient had not been to see an endocrinologist due to financial reasons, and therefore had not received adequate allopathic medication.

### REVISED PLAN AND CONTINUED TREATMENT

The patient was encouraged to seek the medical advice of an endocrinologist and was seen by a general practitioner at the Hetauda Hospital. At that time, a random blood glucose test was taken at 540mg/dl. Patient reported that the doctor gave her diet advice (to cut back on sugar and fat), and said she did not need medication. The patient was given an additional referral and instructions to see an endocrinologist in Kathmandu.

Long-term management of the diabetes should include educating the patient in self-care, self-monitoring of blood glucose levels, and insulin administration. Long-term goals for the patient's health include keeping blood sugar levels within normal range, weight reduction (5-10kg), maintaining diet with limited/no refined carbohydrates and fats, eating small regular meals, keeping a daily ½ hour moderate exercise regimen, reducing stress, peripheral massage to help with circulation, reducing accompanying risk factors (high blood pressure) and identification and treatment of chronic complications.

The patient should participate in routine quarterly check-ups, an annual ECG, a biannual eye exam, and routine checkup for lipids (triglyceride, HDL-C, LDL-C and total cholesterol). The patient should watch for urinary tract infections, monitor the legs for neuropathy signs and diabetic ulcers. Consider low dose aspirin (eg: 75-325mg per day) for cardiovascular protection, chromium supplement for sweet cravings as needed, vitamin E for heart health and blood pressure medication.

### CONCLUSION

When this patient began treatments, she was unaware she had diabetes. Education, encouragement and psychological support were a large part of managing this case. Involving her in the treatment plan was important and cannot be overstated. Our patient/doctor



partnership was highlighted with an agreed upon understanding of the management plan, risks and complications.

In treating DM, acupuncture should be considered adjunctive to allopathic care. Studies suggest acupuncture and TCM are supportive of insulin treatment and may help prevent complications. Our identification of her condition with a proper diagnosis, education and integrative treatment lead to the elimination of her acute presenting complaints. However, proper management of her blood glucose has not been achieved. If this allopathic care cannot be acquired due to the patient's ability to access proper care, the likely result will be a reinfection of candida and a progressive decline of her overall health.

At this point, our role is to support the patient in accessing insulin treatment, providing case monitoring and palliative care.

## Case Study: Central Nervous System Degeneration with Bilateral Chorea-like Muscle Spasms

Allissa Keane RAc

### OVERVIEW

38-year-old female presents with a 4-year history of involuntary spasming throughout her entire body. The patient does not have any available medical records and the cause of spasming is unknown. Over the course of treatments, the patient experienced a feeling of 'lightness' in her body, especially immediately after treatments, and an overall improvement in her well-being. Due to the severity of her condition, permanent change in her spasming is unlikely, however a 20% reduction in spasms was observed during the course of treatments.

### SUBJECTIVE

38-year-old patient presents with involuntary spasming of her right and left hands, shoulders, head, feet and hips. Spasming started 4 years ago in her hands and feet exclusively. The spasming rapidly progressed to the rest of her body within a year and a half. When the condition started, she was taken to the hospital in Pokhara, Nepal where she received two CT scans and a panel of blood tests. The patient was then referred to a different hospital in Kathmandu where she began working with a neurologist. She was given an allopathic medication that made her sleep the majority of the day, only waking twice to eat. Over the course of 6 months, the patient visited the neurologist 3 times before discontinuing appointments. After those treatments, her family noticed that the spasming progressed to her head.

At home, family members report that she becomes easily angered and frustrated, especially around her delayed speech. She also experiences poor memory, concentration, and is unable to handle tasks around the home. Patient expresses feelings of depression and anxiety around her worsening condition. She reports poor sleep due to the involuntary movement. Lastly, she complains of her skin being dry and itchy on her legs, arms, back and chest.

Other than the involuntary spasming and body itching, she does not have any significant symptoms as evaluated by a thorough review of systems.

The patient does not have any medical records available. Her understanding of her condition is limited to "a neurological problem." Her mother and sister also experience the same condition in varying severities.

### OBJECTIVE

Patient presents with bilateral, rapidly spasming movements of her hands, shoulders, head, feet and legs. While she is standing, the right side of her body swings from posterior to anterior. Her hips pop forward causing her back to arch. Her head moves in a fluid, circular motion towards the left. Left hand fingers have a rapid flexion and extension of the third, fourth, and fifth fingers. The thumb contracts over each of those fingers approximately 62 times per minute. The left hand is noticeably worse than the right. The patient's right foot spasms from medial to lateral at a rate of 18 spasms per minute and with a delay of 1 to 2 seconds between spasms. While in the prone position, her right shoulder contracts backwards roughly 34 times per minute. When a response is required from the patient, her speech



is delayed for 3 to 5 seconds, appearing difficult for her to formulate sentences. It is common for her responses to be short and minimal, and often times questions are not answered correctly compared to the answers given by her sister-in-law. When asked about the onset of her condition and any other related questions requiring a chronological sequencing of events, there seems to be confusion and lack of accuracy in her responses.

When asked to focus on controlling the spasms in her left hand, it is observed that they become worse in amplitude and frequency. Patient's eyes are unfocused and often diverted to the right. She has some difficulty making eye contact while in conversation. Eye tracking test is done and shows an inability to follow the finger without movement of her head. The majority of the skin on her body is dry and has raised eczema-like bumps.

The tongue is pale, scalloped on both sides, cracks running horizontally in the centre, and is wet.

### ASSESSMENT

DX: Central Nervous System Degenerative Disorder

Due to the lack of medical records, it is important that there be a general discussion of possible neurological conditions that the patient may have in order to distinguish a potential diagnosis. Because her condition might potentially be in the earlier stages, diseases such as amyotrophic lateral sclerosis, Parkinson's, multiple sclerosis and Huntington's must be considered.

It is unlikely that the patient has Parkinson's disease. Parkinson's patients have slow and stiff body movements, rigidity of muscles, impaired balance, often a stooped posture and gait shuffle. Parkinson's patients may also experience non-motor symptoms



before full-onset including drooling, change in taste/smell, choking and swallowing difficulties and cognitive impairment (Parkinson's Society of Canada). The patient has not reported any of the aforementioned non-motor signs when her condition began 4 years prior.

Amyotrophic Lateral Sclerosis (ALS) is also unlikely. Patients with ALS often present with signs and symptoms that are common in a wide variety of other neurological disorders, especially in the early stages. However, similar to Parkinson's, the presentation generally includes tightness, stiffness, weakness and muscular cramping. This patient presents with more choreal (spastic) movements than typically seen in an ALS or Parkinson's patient.

This patient could be experiencing a form of Multiple Sclerosis (MS) called Primary-Progressive MS (PPMS). PPMS is characterized by a steady worsening of neurologic functioning without any distinct relapses or periods of remission (nationalmssociety.org). The patient's symptoms, primarily the spasming, started 4 years ago and has gradually worsened to the extent at which they are now. Other common signs of MS include urinary incontinence, constipation, extreme fatigue, pain, numbness and tingling. Because the criteria for properly diagnosing MS is so broad, and the degrees of symptoms vary, it is difficult to rule out with proper imaging. However, it appears that MS is a less likely diagnosis because the patient does not experience some of the more common signs such as extreme fatigue and pain-associated symptoms.

Huntington's Disease (HD) is the strongest candidate for a diagnosis. It is important to note that in early stages of HD, there are subtle signs of physical deterioration, such as involuntary movements beginning in the hands and feet, difficulty in walking, and an increase in difficulty performing daily activities (ie. household chores). The patient reports that the spasming started in her hands and feet, and over time, gradually moved up to her head and shoulders. Her family has reported changes over time in her cognitive abilities to recall information, and confusion when it comes to organizing routine matters. The patient also reports substantial feelings of depression and anxiety, which are consistent with an HD presentation. The most compelling evidence for a HD diagnosis would be the chorea-like movements. Unlike the jerky, rhythmic movements of ALS or Parkinson's, Huntington's patients experience uncontrollable, fluid movements, often with a puppet-like gait. This is consistent with the patient's presentation.

Further neurological testing would need to be done for a complete and accurate diagnosis.

TCM DX: External attack of wind on the channels and collaterals

Due to the fact that other than the obvious tremors, there are no signs of an underlying organ pathology, either excess or deficiency, the source of the wind must be external.

## PROGNOSIS

Poor. Due to the onset of this condition in middle age, it is unlikely that the patient will experience full reduction of the spasming. In fact, if a diagnosis of Huntington's Disease is correct, it is expected that the condition will progress in spite of treatment. The goal of treating the patient is to aid in overall well-being, potentially slowing the progress of the degeneration of the central nervous system, and subduing the spasming. This can be accomplished through the use

of acupuncture, Chinese herbs and patient counseling. Focusing on memory and speech improvement will give the patient a greater sense of independence. Referral to an appropriate hospital that will be able to provide a complete neurological examination will further the prognosis and outcome of this case.

## INITIAL PLAN

Due to the severity of the patient's condition, daily acupuncture treatments are prescribed. Fortunately, the patient lives 15 minutes away from the clinic, and is able to walk unassisted to the clinic for treatment.

Overall, initial focus is to expel wind in the whole body to reduce the spasming, while simultaneously nourishing constitutional blood and qi. Typical acupuncture treatment includes combinations of SP10, SP6, ST36, LR8, LR3, RN4, RN6, LI4, DU19, GB 20.

Patient is counseled on the prognosis of her condition, the unlikelihood of a total reduction in the spasming, as well as the positive effects that acupuncture can have on her overall well-being and daily life.

The patient's signature and drawings of circles and squares are recorded before and after acupuncture treatments to measure if there is a reduction, or stabilization, in her movements.

## OUTCOME

After 3 treatments, it appeared that when direct attention was focused on her during needling, her movements became more dramatic and active. A different approach was taken by placing her prone, and using the the Hua Tou Jia Ji (HTJJ) points to help sedate her during treatment. In addition to HTJJ, the back (shu) transporting points of the Heart, Pericardium, Liver, Blood, Spleen, Stomach and Kidney were needled to tonify those organ's qi and to nourish blood.

After a period of treatments, patient reported that she experienced a feeling of 'lightness' during and after treatments. While the needles were retained, there was a significant difference observed in the amplitude of spasming and movement. The movements appeared to be smaller and smoother, and there was a general calmness about her body (see video # 2). There was less of a delay before she would start to speak. She sounded more clear and less interrupted. She was sleeping better at night and waking less frequently. The patient was asked to draw circles and spirals before and after treatment. There was a noticeable difference in the after-treatment drawing. It appeared that her hand was able to steady the pen and press more firmly on the paper (see visual). The drawing process was done every 2 or 3 treatments. She requested that this be done every time, and seemed to look forward to seeing if there had been progress made. Over the course of 13 treatments, her overall demeanor had improved. She came to the clinic with a smile on her face, and each time, more fully engaged in conversation with the practitioner. Family reported that after a period of time, they noticed that she was less frustrated in her speech, and in performing tasks around the home.

Please see links below for recorded evidence of the before-and-after, with needles retained for roughly 15 minutes.

## CONCLUSION

The challenge in this case was the lack of allopathic diagnosis and medical records, coupled with the rapid progression of the patient's condition over the last 4 years. However, it was clear that a significant difference was made in her life through the use of acupuncture and the building of a therapeutic relationship. The need for education about her condition could not be stressed enough in helping her understand and prepare for the potential of it worsening in severity. Family education is also important, at least in part for the purpose of patient support, so that they have an understanding of the severity and progression of her disease. In considering this patient's case, perhaps the most important role for a practitioner would be to help the family research hospitals and neurological specialists and procedures that may be beneficial for the patient.



<http://youtu.be/rWHYd87ELds>

## CASE STUDY: Roundworm Infection with Urinary Tract Infection (UTI)

Asiya Mahdiyah Shoot MSA LAc

### OVERVIEW

30-year-old female presents with lower abdominal pain, burning urination and shortness of breath for the last 5 months. With the discovery and treatment of a parasitic infection, and with concurrent treatment of a urinary tract infection, the patient found significant relief.

### SUBJECTIVE

Patient presents with achy, burning lower abdominal pain with burning urination for 5 months. The burning is daily and constant at a moderate level intensity. It is worse during the night and during her menses, which is regular at 28 days. Menstrual flow is heavy, lasting 6 to 7 days. It is dark in color with some clots. She reports dysmenorrhea with burning pain and cramping in the lower abdomen and back, persisting all 7 days of her cycle. The patient also reports 5 months of burning urination that is scanty, dark yellow and cloudy with a sense of burning and achiness in her urethra. She experiences a sense of urgency and urinates 10 to 15 times a day. Furthermore, she reports loose, yellow-colored stools containing mucus starting 3 months ago. She has a bowel movement 3 times a day. She denies visible blood in the stool and reports no burning sensation of the anus.

Patient reports shortness of breath (SOB) for 1 year, which occurs when walking, and is worse at night while lying down. Symptoms have been worsening for the last 4 months with occasional tightness in her throat, wheezing, sore throat and cough, all of which are worse at night.

She reports feeling tired, having poor memory, night sweats and being irritable and anxious, with difficulty falling asleep.

5 years ago, she had a dilation and curettage (D&C) procedure due to a miscarriage. She has 2 children and is not currently pregnant. She denies any vaginal discharge or rash.

### OBJECTIVE

The patient appears to be in average constitutional health for her age and environment, but appears fatigued and weak as though she is fighting off a pathogen. She is somewhat thin, and often slouched in the chair under a draped shawl. Although her face is somewhat pale, she has flushed, red cheeks and mild, red-tinged eyes. Her palms are damp to the touch. She speaks with a weak voice, and is mentally sluggish, though has many complaints and concerns about her health. She also has a dry cough heard during her treatment visits.

On palpation, the patient is tender and timid. She reports moderate pain that is achy in nature when applying deep pressure to the low abdomen. There is also moderate pain with moderate depth pressure to the mid-abdomen. No tenderness in upper quadrants. Moderate pain on strong percussion of her low back.

No significant findings on auscultation of bowels. Minor wheezing in both upper lobes of the lungs upon auscultation. Vital signs include: Temperature of 98.8°F, oxygen saturation of 98% as measured by fingertip oximeter, and a resting pulse rate of 78bpm.



Her tongue is pale, with red sides and tip. It is fissured, with a thin white coat. Pulses are thin, wiry, a little rapid and slippery.

### LAB RESULTS

Urinalysis Panel:

Pus cells (2-4 HPF) and "plenty" of epithelial cells; Dark yellow color; Slightly turbid appearance and acidic pH; Trace albumin; Blood, ketone, bile and glucose are not seen.

Blood Panel:

Hemoglobin 12.0 gm/dL = low range (normal female range is 12.1 - 15.1 gm/dL)  
 Total leucocyte count: 11,800 cu.mm (normal is 4,00-11,00 cu.mm) = little high  
 Neutrophils 75% (normal 40-70%) = little high  
 Monocytes 00% (normal 002-10) = little low  
 Lymphocytes and eosinophils are in normal range.

Stool Panel:

Most significant finding is presence of ascaris lumbricoide ova (roundworms) along with red blood cells (2-5 HPF).

### ASSESSMENT

DX: Urinary tract infection (cystitis); Roundworm infection; Possibility of Kidney infection due to duration, as well as possible infection or inflammation in the uterus. However, low temperature and medium pain upon palpation of low abdomen and back rule out significant infections.

**Secondary complaint of dyspnea (SOB)**

Explanation: Pus cells (pyuria) in urine indicate some type of infection in the urinary tract. More accurate diagnosis of a UTI requires nitrites to be found in the urine sample. 95% of UTI's occur when bacteria ascend the urethra to the bladder. The most common bacteria is gram-negative strains of e.coli. In addition, increased white blood cells in the blood lab, specifically high neutrophils and low monocytes, indicate a mild bacterial infection. Hemoglobin levels, being on the low end, is probably due to anemia and malnutrition based on patient's environment and parasitic infection.

Roundworms are a nematode (non-segmented cylindrical worm that ranges from 1mm to 1m in length). They are a helminth parasite (compromising hosts nutritional status) that are transmitted fecal-orally when contaminated plants (or soil) with the eggs on them are consumed.

TCM DX: Damp-heat in lower jiao (body): Lower abdominal burning, and burning urination, that is dark yellow and cloudy

LV/KD yin deficiency: Chronic sore and dry throat, knee and low back pain, night sweats, five center heat, feverish, thirsty, dizzy, irritable, insomnia, burning, itchy eyes, blurry vision, burning worse at night

SP/LU qi deficiency: Loose stools, gas, bloating, lack of appetite, fatigue, gastritis, dyspnea, coughing, wheezing

Qi and blood stagnation as indicated by menses

**PROGNOSIS**

Cure of burning urination and burning low abdomen is highly probable within 2 months, with proper conjunctive care, including acupuncture, internal Chinese herbs and Western medications (antibiotics). Typically, acute bladder infections and parasitic infections are resolved within 48 hours after the onset of medication.

Chronic UTI's may take up to 1 month to resolve. The SOB is expected to improve 80% within 3 months.

**INITIAL PLAN**

Treat with acupuncture 2 times per week for 2 weeks. Reassess in 1 week to assess patient's progress after taking parasite medication. If burning urination is not resolved, administer antibiotic medication. In addition, sanitation and hygiene is discussed with the patient, along with recommendation to increase water intake, consume cucumber juice and accessible antibiotics in diet such as raw garlic, to decrease the burning urine.

Acupuncture: Focus on points to clear heat and remove toxins, especially from the lower jiao, nourish yin and blood, Lungs, Spleen and Stomach.

Common points used: LI11, LI4, LV3, KD6, LU7, SP4, SP6, ST36, CV3, CV4, CV14

Alternative points: LV2, KD2, KD3, SP10, KD10, UB13, LU9, CV6, CV12, P6, HT6, TB6, SP8, Zigong

Chinese herbs: Huang Lian Jie Du Tang 3TID for 2 weeks to clear internal heat, then Dang Gui Liu Huang Tang 3 TID to clear yin deficiency heat

Allopathic medicine: Albendazole (400mg PO once) is administered for roundworms. Ibuprofen (400mg TID) is given for 5 days upon first visit.

Subjective: 9 days after initial visit, the patient reports her stools being less yellow and more formed. She is still experiencing burning urination with burning pain into her urethra, but reports a 20% reduction in symptoms with treatment. She urinates 8 times per day and 3 times per night.

**UPDATED PLAN**

Acupuncture treatment 2 times per week for 2 weeks to clear UTI and decrease lower abdominal pain.

Trimethoprim/sulfamethoxazole (160/800 mg PO BID) for 10 days is given for UTI. This medication is later extended an additional 4 days due to unresolved symptoms.

Stool and urine to be retested in 1 week.

**OUTCOME**

19 days after initial visit, the patient reported her stools being formed, 2 times a day, and no longer yellow. The burning in the low abdomen was still daily, but less at night and had decreased in intensity by 70%. She was able to tolerate deep-level palpation to her low abdomen with mild tenderness. The burning urine was 50% less, but still bothersome, with burning pain into the urethra. She was urinating 5 times per day and 3 times at night. Her temperature was 98.5°F. She visibly looked more energized with less redness in her eyes.

The patient reported it being easier to breath and coughing less. She still experienced minor wheezing, heard upon auscultation, but it was less oppressive.

There was also less gastric pain in the mid-abdomen, and only mild tenderness upon deep palpation. Her night sweats and sore throat were also less frequent.

A follow-up stool panel indicated that the helminthic (roundworm parasite) ova and microscopic blood was no longer present.

Urine lab showed pus cells at 3-5 HPF and epithelial cells at 4-8 HPF. Color was light yellow, appearance still slightly turbid, pH acidic and with trace levels of albumin.

**CONCLUSION AND FUTURE PLAN**

This is a case where the patient was reporting a multitude of health complaints that seemed unrelated, and complex. This was compounded by her reluctance to report significant details about her health history. On previous visits to this clinic, practitioners focused on her knee pain and burning itchy eyes, which was mostly resolved by the time I saw her. Her burning lower abdomen and urination was listed among her secondary complaints, but was not found to be significant. This case shows the importance of discerning between signs and symptoms, providing integrative care, and trusting one's instinct to direct proper care and plan-of-action, including the ordering of proper lab panels. This treatment approach exposed and properly treated the roundworm infection.

Thus far, this patient successfully experienced reduction in burning urination, burning low abdomen pain, and a host of other conditions, including SOB. The SOB was likely due to roundworm infection since the larvae move via the bloodstream to the lungs where they are coughed up, swallowed, and travel back to the small intestines where they mature into adult roundworms. Common symptoms



of roundworm infection include coughing, shortness of breath and wheezing. If not resolved in the next month, a proper assessment of asthma needs to be done, and possible administration of asthma medications (bronchodilators beta 2-agonists, anti-cholinergics or corticosteroid etc.) may be needed.

The increased number of pus cells in her second urine test indicated that a urinary tract infection was persisting. Trimethoprim/sulfamethoxazole (160/800 mg PO BID) was extended to 14 days.

If the burning abdominal pain and urination is not resolved within 2 weeks, a stronger antibiotic may be needed. Other causes of pus cells in the urine should be considered, including sexually transmitted diseases, kidney stones, other infectious pathogens such as candida, or even tuberculosis in the urinary tract. Though not likely, cancer must also be considered. Her temperature should be monitored. It may also be necessary to order a gynecological examination to rule out infection, inflammation or scarring caused by the D&C.

Acupuncture and herbal treatments should be continued into the future, 2 times a week for 10 weeks, with focus on tonification and to move qi/blood in the lower jiao. Probiotics, iron supplement and a multivitamin with B-complex should be considered. In 3 months, the patient should be checked again for roundworm eggs. If the case is not resolved within this 10 week period, she should be referred for an ultrasound or CT scan to examine her kidneys and ovaries.

## CASE STUDY: Chronic Epigastric Pain (Chronic Gastritis)

Chanel Smythe MS RAc TCMP

### OVERVIEW

52-year-old female presents with chronic, burning epigastric pain accompanied by acid reflux, nausea, belching and decreased appetite. The patient also experiences daily headaches and dizziness. With conjunctive therapy of acupuncture, Chinese herbal medicine and antacid treatment, the patient reported an 80% improvement in her condition over 10 treatments, experiencing a decrease in severity, frequency and the absence of many symptoms.

### SUBJECTIVE

Patient is a 52-year-old female who presents with moderate epigastric pain, a complaint that the patient has had for 6 to 7 years. The pain manifests as a burning sensation in the epigastric region, at times exacerbated when the patient eats, while at other times is relieved with food. Occasionally, the patient wakes in the night due to her gastric pain. She experiences acid reflux after eating, a decrease in appetite, belching and nausea both on empty stomach and after eating. The epigastric pain is aggravated by the consumption of spicy and greasy foods. Bowel movements are daily, formed and easily passed without pain. The patient denies diarrhea or loose stools, blood or mucus in the stools, and vomiting.

The patient also experiences both headache and dizziness daily, which she has had for 1 year. The headache manifests as a throbbing pain, located primarily in the temporal region and occasionally in the frontal region. Dizziness occurs mostly when the patient moves from a seated to standing position, though occasionally she will experience dizziness when attempting to focus on a point in the distance. The dizziness can be accompanied by blurry vision.

The patient experiences sleep disturbances with both difficulty falling asleep and difficulty staying asleep, often waking several times throughout the night. She reports a feverish sensation in the afternoon, and night sweats.

The patient's diet consists primarily of rice, lentils, vegetables, chickpeas and dado (corn meal and buckwheat).

The patient has not received any medical treatments for her gastric pain, headaches or dizziness.

### OBJECTIVE

Despite the patient's complaints of gastric pain, headache and dizziness, she appears to be in good health for her age and environment.

She experiences a moderate level of epigastric pain and acid reflux after every meal. Nausea and belching is experienced daily. Headaches and bouts of dizziness are also a daily occurrence. Abdominal palpation reveals no masses or objective tenderness in any of the 4 quadrants or on the midline, and no indication of an enlarged Liver or Spleen. Both Murphy's sign and McBurney's point are negative. The patient's blood pressure is 120/70 mm/Hg. Tongue is pale with fissures throughout body. The pulse is thready.

### ASSESSMENT



DX: Chronic non-erosive gastritis, gastric ulcer, potential duodenal ulcer

TCM DX: Stomach yin deficiency, Liver and Kidney yin deficiency

It is suspected that the patient has non-erosive gastritis accompanied by a gastric ulcer, and potentially a duodenal ulcer. Though non-erosive gastritis is generally asymptomatic, it manifests as mild dyspepsia and other vague symptoms, which are part of the patient's presentation. Additionally, non-erosive gastritis is commonly caused by *Helicobacter pylori* (*H.pylori*), a bacteria that is speculated to be in the local water supply in considerable quantity.

Accompanying the gastritis, a gastric ulcer is suspected. Gastric ulcers manifest as a variable pain picture in which the epigastric pain does not follow a regular pattern. A common manifestation of a gastric ulcer, in which eating sometimes exacerbates rather than relieves the pain, is consistent with the patient's pain presentation. On occasion, the patient wakes at night due to her epigastric pain, a common manifestation, and suggestive of a duodenal ulcer. However, the patient does not possess any of the other defining characteristics typical of a duodenal ulcer. Such symptoms include a consistent pain pattern of absence of pain when waking, pain that appears mid-morning, is relieved by food, but recurs 2 to 3 hours after a meal.

Similar to that of non-erosive gastritis, gastric ulcers are commonly caused by *H.pylori* or overuse of NSAIDs. The patient lacks a history of NSAID use, further suggesting that the suspected ulcer is a result of an *H.pylori* infection.

Stomach cancer is not likely with this patient's presentation as there is no occult blood in the stool or concurrent symptoms that often accompany cancer, such as weight loss or extreme fatigue, etc. Stomach cancer may become a concern in the future if the gastritis is due to a *H.pylori* infection, as it has been shown that the occurrence of stomach cancer is 3 to 6 times more common in persons with *H.pylori* infection.

## PROGNOSIS

With regular acupuncture, in conjunction with herbal and antacid treatment, the patient is expected to experience a minimum of 50% improvement in her epigastric pain and associated symptoms. Progress is contingent upon patient's compliance to the treatment plan, and taking herbal and antacid supplementation as prescribed, as well as the avoidance of trigger foods.

If the patient experiences little to no response to the conjunctive therapy within 10 treatments, an endoscopy and stool analysis would be indicated to rule out microscopic blood in the stool. If endoscopy proves *H.pylori* infection, triple antibiotic therapy is indicated. Proton Pump Inhibitor (PPI) therapy would also be indicated at this time to help further mitigate stomach acid.

Both interventions would be supplemented with concurrent acupuncture.

## PLAN

Treat with acupuncture 3 - 4 times per week with daily intake of Chinese herbal medicine and antacids. The patient receives 10 treatments, after which there will be a reassessment of the patient's condition.

Treatment Principle: Clear Stomach heat, nourish yin, promote ulcer healing, and reduce ulcer recurrence.

Acupuncture: Acupuncture treatments generally focus on clearing empty heat from the Stomach and nourishing yin of the Kidneys and Liver.

Typical acupuncture points utilized in treatment consist of ST44, REN12, REN6, ST25, P6, REN17, ST36, KI3, SP6, KI10, LV8, LV3 and LI4.

Chinese herbal medicine: Internally, formulas to tonify Kidney, Liver and Stomach yin, and clear Stomach heat

Liu Wei Di Huang Wan: 3 pills BID for the first 2 weeks of gastritis treatment to simultaneously address the headaches and dizziness

Stomach Formula (Mayway): 3 pills TID for the following week of treatment with focus on nourishing Stomach yin and clearing Stomach heat

Antacid Treatment: Mitigation of Stomach acid to reduce pain; 2 tablets 5-10 minutes before meals and 2 tablets before bed

Lifestyle Advice: Counsel patient to avoid foods that trigger gastric pain, namely spicy and greasy foods.

## OUTCOME

After 10 treatments, the patient reported an 80% decrease in her gastric pain and associated symptoms, as well as her headache and dizziness. She no longer experienced burning epigastric pain upon waking in the morning, and the epigastric pain that remained had decreased from a moderate level of pain to a low level of pain. Additionally, she no longer experienced any acid regurgitation after meals, or belching before or after eating. Her nausea became sporadic, rather than daily, and decreased in severity. She reported an improvement in her appetite. She still woke several times in the night, though gastric pain was no longer the cause. The patient could not note if there was more improvement in her epigastric pain and



associated symptoms on either Liu Wei Di Huang Wan or Stomach Formula.

Her headaches decreased in severity and frequency. Before treatment, she experienced headaches daily. After treatment, she could last several to many days without a headache. Her dizziness was still consistent, though it decreased in severity. Additionally, she no longer experienced night sweats, and the heat sensation in the afternoon decreased in severity and frequency. The patient reported more significant improvement in her headaches and dizziness, night sweats and heat sensation while taking Liu Wei Di Huang Wan.

The patient would experience a recurrence of her epigastric pain when she would overindulge in spicy and/or greasy foods.

## DISCUSSION

According to the District Health Office of Makawanpur, 80% of cases reported to the Hetauda Hospital are for epigastric pain or gastritis. Therefore, it is pertinent to address the nature of gastric pain and what effect acupuncture, Chinese herbs and other forms of supplementation can have on the condition.

The patient responded well to the treatment plan, with combination therapy of acupuncture, herbs and antacids, with varying degrees of efficacy at mitigating the patient's symptoms outlined above. The combination therapy is important for the management of the patient's epigastric pain, and I think that decreased efficacy would result if treatments were to be used out of combination. With continued treatment, it is expected that the patient will continue to improve.

## CASE STUDY: Hemiplegic Stroke Sequelae with Aphasia

Haley Merritt MAcOM LAc

### OVERVIEW

Patient presents with right-sided paralysis of his upper and lower limbs due to an ischemic stroke 9 months ago. Additional sequela includes speech impairment with the inability to say anything, but the phrase "la". On presentation, this patient had not received any other post-stroke treatment. After 25 acupuncture treatments over 7 weeks, the patient was able to walk up to a ¼ mile without assistance, and showed partial control of his middle and index finger. He recovered the ability to say "tho" and "kho" in addition to "la."

### SUBJECTIVE

76-year-old male presents with post-stroke paralysis and speech impairment. 9 months ago, the patient fell suddenly and experienced alternating sensations of paralysis and normalcy in the right half of his body. He also experienced impaired speech and left-sided facial deviation. He was taken to the College of Medical Sciences in Chitwan, Nepal 9 hours later. During his 9-day hospital stay, it was determined that he had experienced an ischemic cardiovascular accident affecting the left temporal lobe and was now suffering right-sided hemiplegia. This occurred due to an embolism occluding the bifurcation of the left carotid artery, likely due to risk factors including his age, gender and a history of high blood pressure, of which he was aware, but refused pharmaceutical treatment. He has not been back to see an allopathic doctor since his initial stay at the hospital. The patient presents at the Acupuncture Relief Project Kogate clinic with the chief complaint of loss of sensory perception and motor control of the right arm and most of the right leg. He has an unsteady gait and difficulty walking. He uses a cane and needs assistance in going down steps. He presents with speech impairment and is only able say the phrase "la" in Nepali.

His secondary complaint includes high blood pressure, which he now manages with a calcium channel blocker (Amlod 10mg PO QD), but admits to being inconsistent with his compliance. He has swelling in the lower legs, especially on the left side, which is better in the morning after resting, and worse during the day after walking. The patient was recommended by the hospital to go to physical therapy, but never went. Additional complaints include low back, abdominal, right-sided chest pain and constipation. Bowel movements occur once per 7 to 10 days, and on 1 occasion, 20 days.

### OBJECTIVE

It's clear that the patient's condition, and inability to speak, create angst and frustration for him. His cognitive function appears to be impaired. When asked to perform certain tasks, like puffing out his cheeks or smelling a perfumed oil, he seems unsure of what is being asked of him and can not complete the task. The patient is relatively sensitive to acupuncture needles, especially on the left side of his body where his motor and sensory ability are still intact. When the needles hurt, he becomes angry, making him averse to acupuncture. His wife encourages him to get treatment, and she reports him being resistant to coming in.

The patient's right arm is rigid and locked in an adducted and flexed position, clenched tightly to his body. He has no control over the movement of this arm, and when it is moved passively he feels pain. His right hand is clenched into a fist, and with passive extension, the



fingers retract into a fist within 1 second. It is very difficult for the patient to move from a seated to a standing position and he needs assistance to stand up. He also needs help putting on his slip-on shoes. His right foot is slightly inverted and he walks on its lateral side. The patient appears to have very limited flexion of the hip and knee on the right side, and he often requires assistance going up-and-down steps. He also has a slight left-sided facial droop.

Neurologic testing of the cranial nerves shows some impairment of the trochlear and abducens, due to the patient's inability to track upward or downward with his eyes. He does not have any hearing in his right ear, though this preceded the stroke. The facial nerve is impaired on the left side as described above. The accessory nerve is likely impaired due to his inability to elevate his shoulders on either side. All other cranial nerves test with normal function.

Deep tendon reflex testing on the right side shows brachioradialis (forearm) to be hyper-reflexive (+2). The hamstring and Achilles reflexes are hypo-reflexive (-1). All other reflex tests prove normal (0).

Sharp/dull sensory testing on the right upper and lower limb is inconclusive. This test made the patient very angry. He was not completely cooperative due to his inability to communicate the results. He does report pain with some needles in his right upper and lower limb indicating some sensory ability on his right side.

Blood pressure: 130/85

Pulse: Slippery and soft

Tongue: Pale and dusky with a thick, white coat and +2 vessel distention

### ASSESSMENT

DX: Post-stroke sequelae with paralysis of the right upper limb, speech deficit and impaired movement of the right hip, knee and ankle



TCM DX: Wei syndrome due to qi and blood deficiency in the Yangming channels; Kidney yin and yang deficiency and Liver yin deficiency leading to Liver yang rising

### PROGNOSIS

The prognosis for full recovery is poor. The patient's stroke caused damage to his brain that is unlikely to be repaired. However, a reduction in the rigidity of his right arm, with a possibility of some regained movement, is expected. Additionally, some improvement is expected with walking, a reduction in the swelling in his legs, and increased bowel movements. The area of his brain that controls speech may have been severely damaged by the stroke, which makes an improvement in speech unlikely. The treatment plan will be long-term and the patient needs to be invested in his recovery in order to be successful.

### INITIAL PLAN

Treat with acupuncture 6x per week for 4 months with reassessment at every 12th treatment. Patient is very averse to strong stimulation. In order to keep him coming in for treatment, it is important to not overwork the patient. Typical treatment includes the use of scalp points along the motor and sensory lines of the upper and lower limbs, with stimulation of the upper limb sensory and motor points while extending the fingers and the forearm and abducting the shoulder on the right side. GB34, KI7, SP6, LV3, SP9, ST36 to ST43 needles 1 cun (1") apart down the channel on the right side, LI11 to LI4, 1 cun apart down the channel on the right side. This style of needling is called pi ci technique.

The patient's wife is asked to massage his legs with mustard oil daily, and elevate his legs above his heart for 30 minutes a day to reduce swelling. She is also asked to help him straighten his arms and legs daily to reduce rigidity. His wife is able to successfully perform the actions 80% of the time. The patient is recommended he go for at least 1 walk per day to increase his mobility. He seems happily compliant with this request.

The importance of taking his blood pressure medication regularly, and correctly, is emphasized to help prevent the patient from having another stroke.

Patient is prescribed Tao Ren Wan to increase his bowel movements and nourish blood and body fluids.

### OUTCOME

This patient was hard to communicate with since he can only say the phrase "la." Most of his progress was reported by his wife who came in with him daily for treatment. However, improvements could be seen in his overall condition. He had a reduction in the swelling in his legs, and was able to walk more easily. After 20 treatments, the patient began walking about 1/4 mile from his home to the clinic, and then back, every morning by himself. He was not able to walk on his own before he began treatment. He began to have bowel movements approximately every other day. His arm used to be flexed against his body at a 90 degree angle. It was now hanging loosely at his side at a 45 degree angle. His hand was no longer contracted into a fist, and his wife reported him scratching his head with his second and third fingers on the right hand while laying on his right arm. This showed improvement in motor control of some fingers. Movement

of his second and third fingers had been observed during his most recent treatments. He also appeared to be in less pain with passive movement, judging by the fact that he didn't cry out in objection to the therapy, as he had before. He could now sleep on his right side and roll from side-to-side on his own, whereas before treatment this was not possible. He was also able to say the words "tho" and "kho" in addition to "la." Once during a treatment, when needles were very uncomfortable for him, he became very angry and shouted out a Nepali curse word. This is a combination of sounds that the patient had not been able to make since his stroke, showing progress in his speech. Since treatment, his wife reported him being able to say different phrases more easily while angry, and having an overall improvement in cognitive function.

### CONCLUSION

With continued acupuncture treatments and help from his wife with stretching and massage, this patient will likely continue to improve. Full recovery of movement and sensation on the right side of his body is unlikely, but some progress is expected. In the same way, full recovery of speech is doubtful, but partial recovery is hoped for. Acupuncture will be vital for continued progress, and significant improvement would likely be seen within 6 months. To ensure that his increased motor function continues, it is important that his wife continues stretching and massaging his limbs, as well as encouraging him to exercise daily.

### DISCUSSION

This patient was very difficult for me to treat. I had very limited communication with him, and he was often very angry and easily agitated. He didn't like the acupuncture and often didn't understand how the treatments could be helpful. After a treatment with this patient, I would often feel very drained, discouraged and angry myself. I discovered a major barrier in my attachment to the acceptance and approval I normally receive from my patients. I was not receiving this approval from him, and instead, I received his anger and frustration. What I learned is that I needed to step back and be more objective and less reactive. By being more open, kind and patient towards him allowed him to be more responsive towards me. Once I adjusted my attitude, he was better able to understand that the acupuncture treatments were actually making a difference. Our relationship became more therapeutic, and we are now both happy to be working together.

A vital part of being a healthcare professional is creating a therapeutic environment that feels safe for the patient. In this environment, the patient can trust that the practitioner is there for them and cares about them. I have found that this relationship can make all the difference in the patient's progress.

## CASE STUDY: Hemorrhagic Stroke Sequelae

Joy Earl LAc

### OVERVIEW

53-year-old male presents with right-sided hemiplegia following a hemorrhagic stroke 1 year ago. Patient complaints include decreased range-of-motion, pain, numbness and weakness of his right side including the shoulder and arm. Concluding 10 treatments, comprising of acupuncture with electrical stimulation and Chinese herbs, the patient reports decreased pain, improved range-of-motion (ROM), increased sensation in limbs, and greater muscle strength.

### SUBJECTIVE

53-year-old patient presents with right-sided hemiplegia after suffering a hemorrhagic stroke 11 months ago. On the day of the stroke, patient experienced muscle weakness along with headache and seeing red. Patient entered shower to pour cold water over his head when he began to feel sensations of insects crawling up the left side of his body. The feelings began at his toes, ascending up his lateral and anterior legs, left hypochondriac region, lower and upper arms, side of his neck and then to his head, where he felt pressure in the parietal region, and lost consciousness. When he regained consciousness, he experienced paralysis on his right side. Patient was sent to Chitwan Medical Teaching Hospital in Bharatpur where he was hospitalized for 2 weeks. After the hospitalization, he attended physical therapy sessions including electrical current therapy for 2 weeks. Patient reports having received several medications unknown to him, and he did not undergo any surgical procedure. 12 months prior to the stroke, he was prescribed blood pressure medication, though was not consistently compliant. While hospitalized during the first 3 days after incident, his blood pressure (BP) was 240/120.

On initial visit to the clinic, patient complaints include a heavy feeling and numbness on the right side of his body, pain in the right shoulder near deltoid attachment, especially with grasping or rotating of arm, pain in upper right side of the neck with movement of his arm, pain in right thumb and wrist especially when grasping, an inability to move shoulder, and accompanying pain with active and passive range-of-motion. He also complains of overall body stiffness, inability to move toes 2, 3 or 4, feeling of coldness in the toes and limping while walking.

Secondary complaints include problems with concentration and with speech when speaking fast, trembling of right hand with certain activities, as well as the inability to dress himself without assistance.

The patient reports that he is currently taking Amlod, a calcium channel blocker, and Losartan/Hydrochlorothiazide, a diuretic, for maintenance of hypertension.

Bowel movements are normal with no complications regarding digestion. The patient reports frequent and urgent urination, nocturia at a frequency of 3-4 times per night, and water intake of 3-4 glasses per day.

### OBJECTIVE

Patient seems solemn and reserved.

Pulse is wiry and thin on the right side, and wiry, thin and slippery on the left.

Tongue presents as thin and pink with a thin, white coat and



stagnation of sublingual veins. Initial blood pressure is 160/100.

ROM in the right arm and shoulder exhibits an inability to actively adduct without causing severe pain to upper shoulder and neck. Lateral flexion of the neck 35 degrees to the right induces pain to the right shoulder proximal to the AC joint. Supination of forearm, beyond 90 degrees, creates moderate to severe pain in anterior shoulder near AC joint. Patient is able to extend leg to full range with no difficulty or pain. Patient is able to move each individual finger, but demonstrates an inability to contract toes completely. The second, third and fourth toes on the right foot are permanently contracted in dorsiflexion. Strength/grasp test of the right hand indicates 30% less strength than left hand.

Sharp/dull sensory testing indicates deficits in the following dermatomes: C5, C6 and S1. They show no sensitivity to stimulation, while the dorsal aspect of foot and toes 2, 3 and 4 experience dull sensation, regardless of sharp stimulation.

Patient exhibits no difficulty in reciting the vowel sounds a, e, i, o, u, cha and la. His face appears symmetrical with no drooping of eyes and lips, or deviation of the tongue. No slurring is noticed upon speaking. His signature is precarious with significant trembling.

### ASSESEMENT

DX: Cerebrovascular accident d/t cerebral bleed; CVA indicates a hemorrhagic stroke leading to post-stroke sequelae with right-sided hemiplegia

TCM DX: Blood and qi deficiency with blood stasis causing blockage of channels and collaterals with internal wind

PROGNOSIS: Good; Although a complete recovery of motor and sensory skills is unlikely, prompt action following incident, including physical therapy, coupled with his overall constitutional health, significantly improves this prognosis. It is expected that acupuncture will continue to improve this patient's condition.

**PLAN**

Treatment principles: Move blood, tonify qi, open channels, extinguish wind.

Acupuncture: 3 times per week for 5 weeks with a reevaluation at the 10th treatment; Focus on stimulating Yangming channels (Stomach and Large Intestine), as well as Gallbladder and Triple Burner channels on affected side. The unaffected side should have a constitutional focus of tonifying qi and blood while clearing any residual wind and phlegm.

Standard treatment comprised of electrical stimulation with leads connecting LI15 to TB5, LI11 to LI4, ST34 to ST41 and GB34 to LV3 at a continuous frequency of 5/100 for 20 minutes; Additionally, left-sided motor scalp line and leg motor and sensory lines are needed to stimulate the right side. Alternating pi ci treatments are performed with needles inserted 1 cun (1") apart down entire Large Intestine channel from LI16 to LI2 and Stomach channel from ST34 to ST44.

Herbal formula, Bu Yang Huan Wu Tang, is prescribed at a dosage of 8 tablets BID, along with increased water intake of at least 8 glasses a day.

Patient is instructed to sign his name before each treatment to analyze trembling.

surround himself with encouragement, and believe in the mind's ability to help the body heal.

**OUTCOME**

Patient was compliant with treatment plan, attending every appointment, and becoming increasingly more energetic and outgoing with each visit.

Patient reported a 50% overall improvement including complete resolution of the thumb, neck and shoulder pain. He reported the ability to straighten toes, as well as increased sensation and feeling of warmth in the toes and upper and lower legs where he had initially experienced numbness. Patient also described increased strength and less shaking in upper and lower leg.

Patient reports that he was now able to remove his shirt by himself. His blood pressure dropped to 130/90.

His signature was more developed, even and distinguishable with a 30% decrease in trembling.

**CONCLUSION**

Currently, the patient has had 11 treatments and is responding very well. His mental and physical states have greatly improved. He reports that before treatments, he had a feeling of numbness and heaviness all over his body. Now, on the day following a treatment, he feels a sensation of lightness in his body and spirit. He often mentions, "I feel great" and has become more cheerful since his first treatment.

The patient continues to maintain a treatment plan of acupuncture 3 times per week. Patient needs to continue this plan for 2 or more months. Following this time, a healthy and active lifestyle is important for maintenance of hypertension, as well as continued improvement.

It has been communicated to the patient that, with many post-stroke cases, the odds of a full recovery are not good. However, due to his diligence and compliance with treatments and care, both at the clinic and initially following incident, his chances for recovery are greater than most. He is reminded to maintain his motivation to recover,

## CASE STUDY: Depression with Emotional Stress and Dream-Disturbed Sleep

Liz Kerr RMT Dip RAc

### OVERVIEW

40-year-old woman presents with depression, emotional stress and dream-disturbed sleep. She presents with a secondary complaint of chronic ringing in her ears. 2 months ago her daughter committed suicide, and she is emotionally distraught from the incident. The clinic provides a safe place for her to express her sadness, and renders her with coping mechanisms otherwise unavailable to her.

### SUBJECTIVE

40-year-old woman presents with stress, unstable emotions and dream-disturbed sleep. Originally, patient complaints were of bilateral knee pain and chronic ringing in the ears, but she has not been to the clinic in over a month. When asked about her previous symptoms, the patient becomes visibly upset and begins to tear up. She explains that her quality of sleep is poor, and she wakes many times during the night. The patient's 14-year-old daughter committed suicide a month prior, and she has not been able to sleep through the night since. The patient reports having dream-disturbed sleep, including nightmares, about the incident. She also reports constant ruminating thoughts about her daughter without any relief. She is distracted from work and has a hard time getting daily tasks at home completed. She has a lack of appetite, is not cooking, and is not eating full servings. She complains of being weak from the emotional pain in her heart and suffers palpitations. She suffers from blurry vision and headaches, which are worse after a crying episode. She also discloses that she has a son and husband at home who are also suffering, and another daughter in Kathmandu.

The patient is unaware that acupuncture and herbs will benefit her stress, depression and dream-disturbed sleep. The patient would like to work on this, and would also like to continue addressing the ringing in her ears. She reports that the ringing in her ears began 1 year ago, and describes it as high-pitched, coming and going throughout the day. The patient reports that she has had diminished hearing since birth. She agrees to a treatment plan of coming to the clinic regularly, but only when her neighbour also comes.

### OBJECTIVE

The patient is visibly upset. She conceals herself under a scarf, which covers her head and lower face. She is not able to look the practitioner in the eyes while explaining how she feels, and tears up when talking about her stress levels and sleep. The patient quickly wipes tears from her face and eyes, and looks frustrated as she does. She has a lack of lustre in her eyes and a dull complexion. Occasionally, there is a scent of alcohol on her breath in the mornings. She is distracted by the ringing in her ears, and needs to have questions repeated. Her voice is muffled, and she speaks with a slight speech impediment (confirmed by my interpreter due to the language barrier).

Her pulse is deep and choppy on the left, and slippery on the right. Examination of the patient's ears shows a bright red irritation along the lower border of the tympanic membrane in the right ear. In the left ear, there is visible scarring on an opaque white coloured tympanic membrane.



### ASSESSMENT

DX: Post-Traumatic Stress Disorder (PTSD) with a secondary complaint of a right-sided chronic outer ear infection

In order to differentiate PTSD from Acute Stress Disorder, it is important to consider that PTSD is identified by recurrent, intrusive recollections of an overwhelming traumatic event. Symptoms of PTSD include avoidance of stimuli associated with the traumatic event, nightmares and flashbacks. Depression, other anxiety disorders and substance abuse are common among patients with PTSD. Symptoms last for over a month. With Acute Stress Disorder, people have been through a traumatic event, have recurring recollections of the trauma and avoid stimuli that remind them of the trauma. Unlike PTSD, Acute Stress Disorder symptoms begin within 4 weeks of the initial incident, last a minimum of 2 days, but do not surpass 4 weeks. As this case spans a timeline of almost 10 weeks following the traumatic event, PTSD is the more probable diagnosis.

TCM DX: Liver qi stagnation with phlegm fire harassing the Heart

Liver qi stagnation as seen in the symptoms of depression, irritability, poor appetite, ringing in the ears and a choppy left pulse. Prolonged Liver stagnation leads to phlegm fire harassing the Heart. This is identified in the symptoms of mental restlessness, insomnia, dream-disturbed sleep, palpitations, lethargy and a slippery right pulse.

Secondary Complaint TCM DX: Outer ear infection - damp-heat in the Sanjiao channel

### TREATMENT PLAN

Acupuncture: Treat with acupuncture 3 times per week for 10 treatments before reassessing.

Focus on calming the mind and promoting sleep (soothing Liver qi and dispersing Heart phlegm). Resolve outer ear infection by clearing heat in the Sanjiao channel with acupuncture and the use of antibiotic ear drops.

Typical points include: Anmian, Yintang, LV3, LI4, HT7, KD7

To assist with clearing the ear infection: SJ17, SI3

Allopathic: Administer Ciprofloxacin antibiotic ear drops, 2 drops TID for 10 days to the right ear to resolve the infection.

Herbal: Internally use formulas to harmonize and soothe the Liver qi:

Chai Hu Shu Gan Wan, 8 pills TID for 3 weeks

Counsel the patient about the purpose of the clinic, reaffirming that it is a place of healing and non-judgement. Assure her that the clinic is a safe place for her to reveal her emotions in order to heal, and convey the importance of healing. Ensure that the patient is provided with a secure environment for her to properly grieve.

### PROGNOSIS

Primary: Using regular acupuncture and herbal treatment, 75% improvement in sleep is expected within 10 treatments. A 50% decrease in stress levels is also expected. This being said, grief is a process that differs from individual-to-individual, and it is not certain how much time this will take. The acupuncture, herbs, environment of the clinic and the support of the community will aid in this healing process.

Secondary: Using antibiotic ear drops and acupuncture, a complete recovery from the ear infection is expected. Ringing in the ears is also expected to dissipate, although the scarring in the left ear, and the speech impediment, indicate that full recovery of hearing is unlikely.

### OUTCOME

The patient continued to have good and bad emotional days. 3 out of 7 days were good. On the good days, she was cheery, talkative and animated in her story-telling of daily events. She spoke with her hands and her expressions were large and without constraint. She came to the clinic on her own, without the support of her neighbour. Her eyes were bright, and she was able to smile while she spoke. On the bad days, she reported crying spells followed by blurry vision and headaches. These, however, were not everyday, as they were before. When asked if the clinic was helping her cope with the stress that she feels, her face brightened, she smiled and said yes, while looking the practitioner in the eye. She was still having a difficult time sleeping through the night due to the difficulty with falling back asleep after dreams. However, she reported that the dreams were not always disturbing anymore, and that sometimes they were good memories of her late daughter. She stated that she misses her daughter, and this was in part the reason why she was unable to fall back asleep. She still felt that, at times, she gets stuck in her thoughts, and is unable to escape them. She was now able to express her sadness through conversation with the practitioner. Her appetite was fully recovered, and she was cooking regularly for herself and her family. She stated that she felt stronger, and able to get through the day. The weakness that she felt before was becoming less and less with each treatment.

After 6 treatments, the patient reported less ringing in the ears. She had an easier time hearing conversations and was less frustrated when trying to listen while in settings where several conversations were occurring simultaneously. The ear infection had cleared and the patient communicated that her hearing had not been further compromised.

### CONCLUSION/DISCUSSION

This case demonstrates that the use of acupuncture and herbs effectively provides support to the healing process of psychological conditions such as PTSD. The environment of the community style clinic also plays a role in benefiting the patient, by providing a place of healing where there are no other options.

The limitations of this case include the lack of objective evidence, as this is more of a psychological case, and measures are often subjective in nature. Background information about the mental state of the patient, as well as if alcoholic behaviours were present before the incident, would be interesting to note. Unfortunately, this information is not available. Despite these limitations, this case demonstrates the effectiveness of acupuncture and herbs in terms of benefitting psychological health, as the patient shows continuing improvement.

It is concluded that further treatment with acupuncture and herbs will be beneficial to this patient. It is both the physical treatment, as well as the environment in which it is administered, that will continue to heal the depression symptoms and the patient's spirit. It is important to have this space available as a safe place for emotions and grieving, as well as a place to break free from everyday routines. Having alternative options available in order to avoid substance abuse is valuable in a rural setting.

Upon further research and speaking with the Acupuncture Relief Project interpreting staff about suicide and village culture, it is found that, just as in the western world, it is a sensitive subject. There is apparently much gossip and talk of the patient and the event amongst people in the community. This gossip is behind the backs of the family involved, and is often about the increased alcohol consumption of the patient. Culturally, the village takes pity on the family. Suicide is not socially accepted, and is viewed as a failure on the parent's account, especially when it involves a young person. Suicide creates an air of bad luck surrounding the community. It is said that the spirit of the deceased is stuck in-between heaven and earth and is in a space of unrest. Spirits are taken very seriously in Nepal, as it is believed that they can harm people. Without knowing the conditions of the home environment, it is hard to speculate if the patient will experience a full recovery. Is there support at home? Do the husband and son respect the grieving process and allow it to occur? This makes the support of the clinic in the community that much more important. The clinic provides not only physical care with acupuncture and herbs, but also a safe place for emotions to be expressed without judgement.

### CONTINUED TREATMENT

Educate the patient about possible coping strategies, such as taking 10 diaphragmatic breaths when the world seems too much, or when she is having trouble stopping the thoughts in her head. As treatment continues, work towards teaching the patient about meditation techniques, and how space for the spirit can be created anywhere.

## CASE STUDY: Ulcerative Colitis

Patty McDuffey LAc MACOM Dipl OM

### OVERVIEW

70-year-old female patient presents with urgent, frequent diarrhea. No enteropathogenic organisms are present, however blood is found in the stool. Allopathic care has been unable to resolve her symptoms. After 17 acupuncture treatments and the use of Chinese herbal medicine, the patient has experienced 75% reduction in symptoms since the initial onset 14 weeks ago.

### SUBJECTIVE

70-year-old female patient presents with urgent diarrhea with initial onset 2 months prior to 1st visit. She suffers from frequent, watery diarrhea 12 times per day that occurs upon waking in the morning, after eating, and throughout the night. Mucus and undigested food are present in the stool. The stool is reported to be red, black, yellow and white in color with a strong odor. Patient was admitted twice to the Chitwan Medical College Teaching Hospital in Chitwan, Nepal and reports no change in symptoms with allopathic medicine, nor does the patient understand the cause. Patient's appetite is poor with little water intake (2-3 glasses per day), and a subjective sinking sensation. She does not have a fever, nor does she experience abdominal pain, but does report feeling cold. Previous to the onset of diarrhea, she reports having a history of normal bowel movements.

### OBJECTIVE

Patient is very soft-spoken, but alert with full mental capacity. She has a gentle, optimistic spirit and appears to be in relatively good health for her age and environment.

Hospital lab tests run at Chitwan Medical College Teaching Hospital 15 days after initial onset of symptoms show an initial diagnosis of dysentery. Complete Blood Count (CBC) shows Eosinophil Sedimentation Rate (ESR) value of 46 Mm/Hr (normal range 0-20). Urinalysis indicates urine pH 5.0 (slightly acidic), potassium level of 2.58 Mmol/l (normal range 3.5-5.5) and urea 14 mg/dl (normal range 20-40). Stool culture shows a RBC (Red Blood Cell) count of 2-4, indicating blood is present in the stool, a pus count of 6-8 with mucus present on physical examination, and no enteropathogenic organisms after 48 hours of incubation. No pain on abdominal palpation, nor abdominal masses, are found. Slight gurgling is detected in the lower left quadrant of the abdomen on palpation. Hands and feet are cold to the touch.

While at the hospital, the patient was given the following medications at an unknown dosage and duration:

- Cifran: Ciproflaxacin - broad-spectrum antimicrobial
- Metron: Metronidazole - antibacterial and antiprotozoal
- Ondem: Serotonin type 3 receptor antagonist, typically used for nausea/vomiting associated with cancer and post-operative treatment
- Pantop: Proton-pump inhibitor for gastroesophageal reflux disease (GERD)
- Bifilac: Probiotic
- Dometic: Domperidone - antiemetic
- Codophos: It is not clear which medication was administered;



either Odophos, which is an iron mineral supplement, or Colophos, which is a laxative.

- Potclor: Potassium electrolyte supplement
- Enterogermina: Probiotic/anti-diarrheal
- Doxobid: Doxofylline - anti-asthmatic

Upon discharge from hospital, the patient was administered the following meds:

- Dometic 10mg PO TID (3 days)
- Pantocid 40mg PO BID (10 days)
- Codophos 15mg PO TID (2 days)
- Enterogermina 1 Tab PO QD (7 days)
- Potclor 15ml PO TID (5 days)
- Doxobid 400mg PO BID (10 days)
- Cifran 500mg PO BID (5 days)
- Metron 400mg PO TID (5 days)
- Seroflo 250mcg PO BID (continuous); Fluticasone Propionate is a corticosteroid used for asthma. The patient has a history of asthma.

Pulse is slippery, and the tongue is red and moist with a thin, white coat.

### ASSESSMENT

DX: Ulcerative colitis

Differential DX: Colorectal cancer; Diverticular bleeding

Due to the presence of pus and blood in the stool, another diagnosis could be colorectal cancer. This diagnosis seems less likely because the abdominal scan is negative for masses, nor is occult blood present in the stool. Another possibility is diverticular bleeding.

This is more likely than colorectal cancer as diverticular bleeding becomes more common with age. However, it often causes major bleeding, which is not present in this case. Ulcerative colitis is the most likely culprit, with frequent bloody diarrhea being the primary symptom. Systemic symptoms are often absent or mild. It can also be aggravated by NSAID's.

TCM DX: Primary - Spleen and Kidney yang deficiency with sinking Spleen qi; Damp-heat present in the Stomach and Large Intestine

PROGNOSIS: Good recovery is expected due to her overall good health and relatively short duration of symptoms.

### INITIAL PLAN

Electrolyte salt pack is administered on first visit for rehydration.

Acupuncture and moxibustion 3 times per week for 3 weeks before reevaluation. Focus on lifting Spleen qi, nourishing the Spleen and the Kidney and clearing damp-heat from the intestines. Use of moxa is intended to replenish pure yang energy in the Kidneys. Herbal treatment of Bu Zhong Yi Qi Tang 2 pills TID to nourish and lift Spleen qi. Diet recommendations include the elimination of dairy and the inclusion of more high fiber foods such as fruits and vegetables, meat and warming (aromatic) foods to address nutritional deficiency. Increase liquids to at least 1 liter water per day. If symptoms do not continue to improve over the 1st course of treatment, further lab tests will be ordered.

Typical treatment: ST36, ST25, CV12, CV6 and LI 0 with 1" deep needle insertion

Alternate treatment: SP3, SP4, DU20, LI4, SP15 and ST37

Treatments include abdominal indirect moxa at the periumbilical region near ST25, SP15, CV12 and CV6. Particular emphasis is placed on the herbal formula as patient needs to receive daily care and nourishment to fully recover.

### OUTCOME

After the 3rd treatment, little change was seen with Bu Zhong Yi Qi Tang, so the formula was changed to Fu Zi Li Zhong Wan (8-10 pills, TID) alternating with Li Zhong Wan (3 pills, BID). More emphasis was placed on tonification of the Kidney yang energy. At the 6th treatment, the patient reported that the stools were more soft than watery. Mucus and undigested food in the stool were still present.

At the reevaluation (9th visit), the patient was having 7-9 bowel movements per 24-hour period, approximately a 40% improvement from the initial visit. Her appetite was better and she was eating a wider variety of foods 3 times per day. Though mucus was no longer seen in the stools, there was still a strong odor and the patient continued to experience urgency to use the toilet. A high fiber, low fat diet was recommended. At this treatment, the patient reported feeling dizzy since the initial onset of symptoms 3 months ago.

The patient took a minor fall sometime in the days after the 9th treatment, injuring her left medial knee joint. As a result, ibuprofen was administered to decrease inflammation. An increase in bowel movements to 10-11 per day coincided with the administration of ibuprofen, suggesting that the NSAIDs were irritating the mucosal membranes.

After cessation of the ibuprofen (13th visit) the patient reported

only 3-4 bowel movements per 24-hour period for the previous 4 days. However, she still experienced days with as many as 8 bowel movements. Stools still alternated between soft and watery with strong odor and yellow in color, but were not always urgent.

Ten weeks (15th visit) after initial acupuncture treatment began, an herbal formula was added to further help clear heat from the intestines: Qing Wei San 6 pills TID. Fu Zi Li Zhong Wan was reduced to 6 pills TID. After the addition of Qing Wei San, the patient's stools reduced to 3-4 per day with a formed consistency. At this time, a follow-up stool analysis and CBC was ordered. Pus cells were no longer found in the stool with the RBC count in the stool reduced to 0-1 HPF.

Treatment plan was modified to continue with 1 acupuncture and herbal treatment once per week for 2 additional weeks before requesting another stool analysis and CBC. If blood is still present in the stool or if symptoms return, a colonoscopy will be ordered to determine further course of action.

### CONCLUSION

Over the course of treatment, the patient experienced significant improvement in symptoms and arrived for each appointment optimistic about her progress. Due to her age, recognizing the role and good health of the Kidneys in her treatment prognosis is critical to her well-being. 2 critical points in the treatment plan were the switch from focusing on the Spleen to focusing on the health of the Kidney yang energy and the addition of the heat clearing formula to stop bleeding in the intestines. When little results had been achieved from the formula, Bu Zhong Yi Qi Tang, the treatment approach was changed to more strongly nourish the Kidneys. The formula was switched to a Kidney-based formula in the Li Zhong Wan family. When the stool analysis showed that there was still blood present in the stool, Qing Wei San was added to help cool the gastrointestinal tract and stop bleeding. Diarrhea can be an especially dangerous symptom for the elderly. With acupuncture, Chinese herbs, supportive care and allopathic testing, I am optimistic that the patient's health will continue to improve. A colonoscopy would confirm the diagnosis of ulcerative colitis at which point a more accurate management plan and prognosis could be made. At this point in her progression, I expect that the patient will need to continue care at the clinic for an additional month, focusing on herbal and dietary therapy to resolve her condition. As a member of the elderly community in a small, rural village in Nepal, the improvement in my patient's health is a significant contributing factor to the health, well-being and sustainability of her community.

## CASE STUDY: Acute Neck Pain with Psoriasis

Phonexay Simon MSOM LAc

### OVERVIEW

45-year-old male presents with psoriasis for 5 years, possible psoriatic arthritis for 2 years, and idiopathic neck pain and stiffness for 2 months. After 17 treatments of acupuncture and herbs, he has regained full range-of-motion, has less pain in his neck, his rashes are less painful and itchy, and he has more movement in his fingers and toes due to a decrease in swelling.

### SUBJECTIVE

45-year-old male presents with lesions on his scalp, back and limbs that began about 5 years ago. When his condition began, the patient was in Qatar working with construction and plaster. The lesions subsided upon his return to Nepal, and completely resolved within a year of being back. He continued to work in Kathmandu with plaster and construction. 2 years ago, he noticed the lesions returning. When the lesions erupted again, they began on his scalp, and continued to spread down his back. From there, the lesions spread to his abdomen and legs. Patient reports moderately achy and sometimes burning pain, with moderate itchiness that can be a nuisance at night. He finds them to be most bothersome during the day, and especially when he first wakes up, because it is the first thing that he notices. The patient reports that when he scratches the lesions, they are "weepy with water," and bleed. He has seen 1 other doctor in Kathmandu who gave him some creams and medication, but the patient does not recall what they were. They were not helpful. The rash does not subside with soap, or cold or hot water, and is actually irritated by most of the soaps that are available. As a result, the patient has stopped using soap entirely. Other than soap, the patient does not know if there are triggers that aggravate his condition, and he denies being emotionally or physically stressed.

The patient reports swelling with stiffness in the joints that began about 2 years ago, and has gotten progressively worse. Swelling occurs in the small metatarsals of his right foot, and his thumb, index and middle metacarpals on his left hand. He experiences moderate pain in his wrists and shoulders. He reports that his fingers are hard to move and bend, are usually moderately painful, and occasionally feel hot and burning. They are sometimes aggravated by cold. His brother also suffers from the same type of lesions, and swelling.

The patient presents with neck and shoulder pain that began about 2 months ago. The onset was idiopathic, sudden, and he cannot recall any possible causes. He reports the pain to be very severe and achy, with no sharpness. He says he can feel an electric sensation running downwards to his fingers when he coughs. Occasionally, the pain radiates up to his temporal area, or down to his wrists and hands. However, he denies numbness and tingling, or loss of strength in his arms and hands. Patient has severe pain and stiffness when resting, and he currently takes Paracetamol (acetaminophen- dosage unknown) to provide about 12-13 hours of pain relief.

Currently, the patient is not working due to his conditions, and he is supported and cared for by his son and daughter.



### OBJECTIVE

The lesions on the patient's body range from a large diamond-shaped patch on his lower back, that is about 5" wide and 8" long (his largest lesion), to multiple smaller ones ranging from .5" to 2" in diameter that stagger throughout his upper back, abdomen, elbows and legs. The lesions are discrete plaques that have a pink and tender appearance, as well as shiny, silvery white "scales." There are multiple breaks in the skin with some blood and weeping, possibly due to scratching. There is flaking and dryness on his scalp.

He has some obvious swellings on his toes and fingers. Most noticeably, his right second metatarsal, left thumb and third metacarpal are swollen to double the size of the same joints on the opposite hand and foot. He has limited range-of-motion in his right hand and can only clench his left hand 50% of normal, making a "C" shape.

The range-of-motion in his neck is 15 degrees flexion (normal 50 degrees), 30 degrees extension (normal 60 degrees), and lateral flexion of only 20-25 degrees bilaterally (normal 45 degrees). Most limited ROM is the lateral rotation of 10-15 degrees bilaterally (normal 80 degrees), and the patient has to move his entire torso to compensate for the lack of rotation. He reports moderate to severe pain in all movements past these ranges, and his face indicates that he is uncomfortable.

His labs are positive for elevated rheumatoid factor. This can be indicative of rheumatoid arthritis, but can also indicate other kinds of autoimmune disorders, such as psoriasis and psoriatic arthritis.

The patient seems in good spirits and looks healthy for his age and environment. He smiles during the whole interview, even when he is doing something that is uncomfortable. He makes eye contact during conversation. When rising from the chair to go to the massage table to undress, he rises very slowly, deliberately and is gentle with his motions.

His pulse is soft, thin, slippery and empty in the deep Lung position. His tongue is pale pink, slightly puffy, with teethmarks and a white coat that is thin in the front, but thicker in the back with small, bilateral prickles.

### ASSESSMENT

TCM DX: Lung qi deficiency leading to wind-damp-heat, and qi and blood stagnation in the foot Shaoyang channel; Possible underlying blood deficiency

Lesions on the skin indicate involvement of the Lung organ system according to Chinese medicine, and the nature of resolving and





recurring are indicative of a wind pathology with an underlying blood deficiency.

Western DX: Psoriasis with psoriatic arthritis

While rheumatoid arthritis is still a possibility, the history of a prolonged, severe psoriatic condition makes it more probable that it is psoriatic arthritis. However, both psoriatic and rheumatoid arthritis are treated similarly. His neck pain and stiffness are likely due to acute muscle strain and/or tendon sprain of the neck as a result of unidentified causes. It is a possibility that the arthritis is affecting the patient's neck, but physical examinations and presentation indicate a muscular source of his problem, rather than vertebral.

The pattern of lesions on the patient's skin most resembles a condition of psoriasis. Psoriasis is a dermatological inflammatory condition due to immune stimulation of epidermal cells (keratinocytes). Although its exact cause is largely not understood, the result is erythematous lesions on the body. The presentation of lesions can be pustular, but the most prevalent and classic presentation is the discrete papules, or plaques, with thick, shiny, silvery scales. A family history is common, and there is a genetic susceptibility that can be triggered. Therefore, the condition can have episodes of spontaneous remission and recurrence, or triggered eruptions followed by remission when the trigger is removed.

### PROGNOSIS

With regular use of both acupuncture and herbal treatments twice weekly, at least a 50% improvement in his severe neck pain and stiffness is expected within 13 treatments. The psoriasis is much more difficult to predict. Psoriasis is a difficult condition to completely understand and manage, even with good access to resources, unlike the situation the patient faces in Nepal, where resources are less accessible. Psoriasis is considered mild if less than 10% of the body is covered in lesions. Since the lesions cover about 20% of the patient's body, his case is moderate. There are many important

factors to consider, such as genetics, environment, lifestyle and psychoemotional triggers. Using acupuncture and herbs alone, a 25-50% improvement in the moderate pain, itching and size of the psoriatic plaque, and arthritis, is expected within 13 treatments.

### INITIAL PLAN

Treat with acupuncture twice weekly for 13 treatments, in conjunction with Chinese herbal medicine, before reassessing. For the rash, focus on reducing moderate itch, and possibly the size of the psoriasis. In the joints, focus on reducing moderate pain and swelling. Reduce severe pain and increase range-of-motion in the neck. Use herbal medicine to reduce inflammation of the lesions and joints, then begin to tonify blood and strengthen Lung.

Typical points include wide Hua Tou Jia Ji points, inserted laterally towards the transverse processes, from C2 downwards, with SI14, GB20, SJ3 and SI3 to open the DU. Trigger points in the areas of the neck and shoulders are also indicated. To clear damp and heat, use LU5, ST40 and surround the largest lesion. To tonify and circulate, use ST36, UB13, UB17, LI4 and LV3.

Formulas to take internally are Xiao Feng San for clearing wind and itch. Add Dang Gui Yin Zi or Si Wu Tang to tonify blood once itching is reduced. Have patient take home moxa stick and 7 star needle, to try for 1 week, to see if it helps with the itchiness or size of the lesions.

Counsel patient to spend time in sunlight. UV therapy has been shown to be effective for psoriasis. Continue to guide patient on being emotionally aware, and to release negative emotions if possible. Psoriasis can be triggered or aggravated by emotions and stress. Educate patient on what psoriasis is, and what is going on in his body at a very basic level, and that the condition may come-and-go on its own. Try to identify possible environmental or lifestyle triggers so that he can take steps towards avoiding them, if possible.

### OUTCOME

After 13 treatments, the patient reported a significant decrease in the itchiness of his psoriatic lesions from moderate to mild, but no noticeable decrease in the size nor the amount of lesions. He wasn't noticing the itchiness as much when he woke in the morning, nor during the day. He reported that the moderate pain in his fingers and toes had decreased to mild pain, and that it was easier for him to bend them. His left hand could close to about 75% of a completely closed fist. The most significant improvement was in the patient's neck. He reported that it was easier to move his neck, and the pain had decreased from severe to moderate pain. For the past few weeks, he needed his son or daughter to help him get up out of bed, but now he was able to rise from bed on his own. Range-of-motion tests showed that the patient could laterally rotate his neck, up to 55 degrees, without having to move his torso. His flexion improved slightly to about 25 degrees, or just half of full flexion. Extension was still around 30 degrees with minor pain in the front of his chest, and lateral flexion improved to almost full 45 degrees, but with moderate pain and stiffness.

### CONTINUED PLAN

Beginning at treatment 14, more emphasis was placed on recovering range-of-motion in his neck, rather than on surrounding the psoriasis lesions.

## CONTINUED OUTCOME

On treatment 17, the patient had full lateral rotation to 80 degrees, and only with mild pain and stiffness. He could also manage full flexion, with only slight (very mild) pain in the back of his neck. Extension was much better, at 40 degrees, with very slight pain in his pectoral region. Lateral flexion had almost returned to a full 45 degrees, but he had to perform the motion slowly. He was able to lift his shoulders to 90 degrees more easily, which is not something he was able to do previous to the treatments, though it was not measured at the initial visit. Overall, there was about 80% improvement in the presentation of his acute neck pain.

The patient's movements became quicker and he no longer moved as gingerly as he had at the initial visit. He could also look up more comfortably during conversation. He enjoyed moving his neck to show the increased range-of-motion he was experiencing.

The patient's psoriasis condition improved slightly. There was a reduction in itching and pain. He said that the combination of acupuncture, herbs and the home moxa treatments had been incredibly helpful in decreasing the constant and moderate pain and itching from his lesions. He reported that the itching was no longer constant and the pain was more mild. Inspection of his lesions showed that many of the smaller ones had decreased scaling and appeared tender, but according to psoriatic progression, this was a small improvement. The largest lesion had less weeping and bleeding, possibly indicating that he had been scratching less. There was at least a 50% improvement in the moderate pain and itching of the lesions, though only a 10% (at most) improvement in the appearance and size of the lesions.

He reported that the swelling in his fingers and toes continued to improve. The moderate pain was mild and intermittent. The swelling had decreased to where the patient was able to close his left hand 90%, in comparison to the 50% from the first visit.

## DISCUSSION

Psoriasis is an interesting condition because there are so many factors involved, therefore many therapies with which to try to manage. Western therapies include UV light therapy, vitamin D, immunosuppressants, corticosteroids and other anti-inflammatory drugs, along with education about possible environmental and emotional triggers that can be identified and possibly removed. Unfortunately, in Nepal, many drug therapies like Coal tar, Anthralin, and Calcineurin Inhibitors (anti-inflammatories) are not available. Also, it is difficult to educate the patient on how to use the drugs properly, and to monitor patients once they begin using potent drugs for a prolonged period of time. Therefore, drugs that tax the Liver and Kidneys such as Methotrexate or immunosuppressants like systemic corticosteroids are not viable options. More research needs to be done for viable therapies that are readily available to the patient, such as emollients (especially with salicylic acid), that can help to soften the lesions. Hydrocortisone is available in Nepal, but the large surface area of lesions makes it both contraindicated and expensive. Vitamin D3 analogs have been shown to be effective, and he can absorb it by UV (sun) therapy. The process of questioning, communicating and educating the patient about environmental, emotional and lifestyle triggers is also difficult, due to cultural and language barriers.

The acute neck pain and stiffness has been resolving nicely. Even



though acute situations can resolve on their own, I believe that the treatments quickened healing, and helped him regain his range-of-motion. The patient has also begun mentioning pain "deep inside" his neck, so it may be worth considering if there is an arthritic cause to his neck pain, and if he may begin to develop chronic neck pain.

The most important part about this case, however, is that from the initial visit with the patient, I was focused on trying to help him with his psoriasis, due to my own interest and curiosity from a practitioner's standpoint. My perspective and perception about the case shifted at the reevaluation, when I realized how much the neck pain and stiffness was affecting his quality of life. At that point, I was able to focus more on making tangible gains in his mobility, and he was very responsive to the treatments. This shift in emphasis was vitally important to his daily well-being and a good outcome to this case.

## CASE STUDY: Primary Hypertension

Hanna DeFuria MS LAc

### OVERVIEW

3 patients present with stage 2 essential hypertension (HTN), 1 of which is a female (76 yo) and 2 of which are male (61, 50 yo). In addition, each patient presents with knee pain and various other tertiary complaints. All 3 patient's conditions are pharmaceutically unmanaged. However, through herbal supplementation, acupuncture treatment and lifestyle education, each patient's blood pressure was reduced to normal, prehypertensive or stage 1 range.

### SUBJECTIVE & OBJECTIVE FINDINGS

**Patient 1:** 76-year-old female patient presents with constant headaches that alternate between both the temporal region as well as the vertex. The patient's headaches are often accompanied by dizziness, and exacerbated by the ingestion of spicy foods. The patient has floaters and experiences regular bouts of blurred vision. She has a history of bilateral eye pain and right-sided cataracts. Both eyes are frequently bloodshot. The patient appears dehydrated as measured by skin pinch test, which demonstrates tenting. The patient's feet, however, are moderately edematous, but not pitted. Rebound is not timed. Although she does not currently smoke tobacco, the patient purportedly did so for 47 years prior to 2013.

The patient complains of frequent bloody noses, swollen ankles and a tingling sensation in her feet. Secondly, she reports lower extremity heaviness and aching, primarily felt in the knees. Lastly, the patient complains of low back pain that is sore in nature. Flexion and extension of the back are limited and elicit mild to moderate pain, though the patient has maintained full range-of-motion. The patient is slight, possessing a small frame, and mildly hyperkyphotic stature. Her symptomology has reportedly spanned the last 6-7 months. Blood pressure is measured at 160/110.

The patient's answers to questions are short and of an irritable tone. She is reluctant to engage, and often rolls her eyes when given lifestyle advice.

The patient's tongue is peeled and heavily fissured, while the pulses are strong, forceful and wiry.

DX: Stage 2 essential hypertension  
Diagnosed 4 months prior at Patan Hospital, Kathmandu

TCM DX: Liver yang rising  
Constitutional Kidney yin deficiency

**Patient 2:** 61-year-old male presents with high blood pressure, measured at 180/110. The patient's secondary and tertiary complaints are bilateral knee and low back pain. The patient experiences occasional, infrequent and random dizziness and blurred vision. Both symptoms are exacerbated by the ingestion of hypertensive medication, and are intensified by bright light. He sites this limited experience with his medication as further deterrence for long-term allopathic treatment. The patient reports regular epistaxis. The most recent of epistatic events purportedly lasted 10 hours. He admittedly consumes moderate amounts of alcohol on a nightly basis. Despite his efforts to increase water intake, he tries, but struggles to decrease salt consumption.

The patient is of medium stature and average build. At times, he is



highly engaged in treatment, making good eye contact and easily communicating symptoms. His enthusiasm is erratic however, and his commitment to regular therapy is inconsistent. His attendance ranges from daily visits to random weekly appearances. Similarly, his tolerance for questioning is unpredictable.

The patient's tongue is bright red, and the coat is fury and yellow. The patient's pulse is wiry.

DX: Stage 2 essential hypertension

TCM DX: Liver yang rising  
Kidney yin deficiency; Qi and blood stagnation

**Patient 3:** 50-year-old male presents with high blood pressure, measured at 184/108. The patient reports red, itchy eyes and blurred vision. Upon further questioning, the patient confirms occasional epistaxis. His sleep is restless and disturbed with frequent night sweats. All symptomology is intensified by the ingestion of spicy foods. The patient denies headaches and dizziness.

The patient appears physically fit. His movements are quick and erratic. His focus is on his knee pain and trigger finger, but he is attentive and receptive to lifestyle coaching. The patient is reliable and highly compliant with the treatment plan and recommendations.

Tongue is red, and the coat is both thin and white. The pulse is wiry.

DX: Stage 2 essential hypertension

TCM DX: Liver yang rising  
Kidney yin deficiency; Qi and blood stagnation

### ASSESSMENT & TREATMENT

Allopathic perspective: Hypertension refers to elevated systolic and/or diastolic blood pressure. Ideally, blood pressure is measured at 120/80 while 120-139/80-89 qualifies as prehypertension. Stage 1 hypertension is diagnosed at 140-159/90-99 and Stage 2 is >160/>100.

Hypertension is often times asymptomatic. When signs and symptoms do appear however, dizziness, facial flushing, headache, fatigue, epistaxis and nervousness are common. Such symptomology is not unique to high blood pressure, and is likely the manifestation of a complication involving an affected organ.

The etiology of the disease is difficult to define, as many factors may contribute to the development of hypertension throughout one's life. There are 2 overarching categories based on the origin of the diagnosis: essential and secondary. Essential hypertension, or primary hypertension, implies an unknown etiology and accounts for the majority of hypertensive patients. The small population suffering from secondary hypertension likely have kidney damage, or endocrine dysfunction, that in turn causes the blood pressure to rise.

A blood pressure cuff, or aneroid sphygmomanometer, is utilized in the measuring and diagnosing of blood pressure. It is important to evaluate the patient's blood pressure on at least 2 separate occasions to ensure an accurate diagnosis, as blood pressure may fluctuate.

For a newly diagnosed patient, further examination may include routine testing to detect target-organ damage and cardiovascular risk. Urinalysis, spot urine albumin, creatine ratio testing, blood tests (creatinine, K, Na, fasting plasma glucose, lipid profile), thyroid-stimulating hormone measurements and an ECG may also be conducted.

1 of the primary factors associated with essential hypertension is high animal fat or sodium chloride consumption. Other lifestyle choices that play a large role in the development of hypertension include smoking tobacco, and drinking alcohol and coffee. Although chronic alcohol intake is one of the strongest indicators of high blood pressure, even moderate intake can lead to the development of hypertension in a percentage of individuals. Similarly, smoking is a strong contributing factor. This is exacerbated by the tendency for coexisting sugar, alcohol and caffeine ingestion.

The high correlation between lifestyle choices and hypertension implies the opportunity for resolution through lifestyle modification. Mild hypertension can often be resolved through weight loss, restricted sodium consumption, exercise and relaxation. For those with more severe hypertension, drug therapy is often considered necessary. Prescription treatment typically includes diuretics (thiazides, loop diuretics, potassium-sparing agents), ACE inhibitors (captopril, enalapril, lisinopril), calcium channel blockers (diltiazem, amlodipine, verapami, nisoldipine), vasodilators (hydralazine, prazosin, clonidine, minoxidil) and/or beta-blockers (propranolol, acebutolol, betaxolol, carteolol). The initial pharmaceutical intervention in Nepal involves a beta-blocker called Atenolol. Atenolol is available at most health posts countrywide.

Despite the variety of antihypertensive medications, a percentage of blood pressure patients go untreated. Such patients are at great risk for debilitating, or potentially fatal, heart conditions, cerebral hemorrhage or infarction, renal failure or stroke.

TCM perspective: All 3 patient's range dramatically from a constitutional perspective. The group of individuals varies in gender, age and lifestyle and demonstrate diverse signs, symptoms and peripheral complaints. Nonetheless, they all share the same disease and corresponding diagnosis: Hypertension due to Liver yang rising.

Liver yang rising is characterized by symptoms of facial flushing, headache, dizziness, disturbed sleep and irritability. Various eye

complaints, epistaxis and soreness of the low back and knees are also symptoms associated with this diagnosis and are common amongst all 3 patients. The upward movement of yang is the result of an underlying yin deficiency. Without adequate yin, the Liver fails to be nourished and anchored, which in turn leads to yang rising.

Patient 1 and Patient 2 are approximately 10 and 15 years older than Patient 3. Consequentially, their lists of symptoms are more extensive as a result of the more progressive nature of their conditions. This is likely the result of further depleted yin reserves.

Treatment: Throughout the course of treatment, each patient's blood pressure and related symptoms are heavily monitored. Each patient receives acupuncture, herbal supplements and dietary recommendations. Various local points are utilized for secondary and tertiary complaints, while the overlapping acupuncture points included LV2, LV3, KD7, SP6, LI4, LI11 and DU20 (needled against the channel). The apex of the ears bled upon each visit. All 3 patients are prescribed Wu Ling San, 3 tablets BID. In addition, each patient is advised to greatly reduce his or her sodium intake, and increase water consumption. The adverse effects of smoking tobacco and drinking alcohol are discussed, and decreasing usage suggested.

#### PROGNOSIS & SAFETY MEASURES

The prognosis is fair. Response is expected within 6 treatments. Given the advanced nature of each patient's condition however, reducing systolic and diastolic measurements to within normal limits is less likely. A steady reduction in either or both numbers requires continued treatment. Strict adherence to the treatment plan is required, as daily acupuncture, herbal and dietary compliance creates greater opportunity for recovery.

Prior to treatment, the severity of the cardiac condition, and the potential complications, are discussed. Both eastern and western treatment options are communicated. If progress is not documented within the first 6 preliminary sessions, the patient is to be referred to an allopath or prescribed hypertensive medication.

#### OUTCOME

Over the course of 6 treatments, all 3 patients began to see significant results.

Patient 1: Upon conclusion of the sixth treatment, the patient's blood pressure was measured at 116/80. The patient reported less severe headaches, experienced at a lesser frequency. The patient no longer experienced floaters or had painful eyes. The patient's skin no longer tented upon pinching, and she no longer suffered from lower extremity edema. She still complained of the occasional episode of tingling in her feet. Her low back pain had decreased by half with treatment 3-5 times a week. The patient's attitude had improved as her conditioned improved. She explained that as her body healed, she was less uncomfortable, more productive and less agitated.

Patient 2: While under my care, the patient's blood pressure was measured at 150/90 by his sixth visit. Within 2 more treatments, both acupuncture and herbal, the patient's blood pressure was reduced to 140/90. His dizziness and blurred vision subsided entirely, despite exposure to bright light. The patient had not had a bloody nose since treatment commenced. Both the patient's back and knee pain were decreased significantly. Purportedly, the back pain had ceased while the knee pain improved 90%. The patient's unreliability was ultimately

short-lived. He soon returned for daily treatment, and his tolerance for lengthy intakes became less volatile.

Patient 3: The patient's blood pressure was reduced to 150/94 within 6 treatments. The patient's eyes were no longer itchy or red. Only occasional blurring of his vision persisted. While under our care, the patient had not had another bloody nose. His knee pain improved 50% and his trigger finger improved 75%. Although highly compliant, the patient's wife fell ill, and he was unable to continue further treatment.

## **DISCUSSION**

Hypertension is extremely prevalent in Nepal. However, due to limited access to healthcare, high blood pressure often goes undiagnosed. Many patients do not receive adequate education regarding their hypertensive condition, and are unaware of its associated risks and complications. In addition, many prefer native forms of treatment over that of conventional medicine. For these various reasons, the condition commonly goes unmonitored, or remains unstable and potentially life threatening.

For those patients who pursue a formal diagnosis and the appropriate medications, compliance is highly variable. This is also true for those who pursue acupuncture and herbal treatment. Regular attendance is required, daily herbal dosing is a necessity, and consistent efforts to make healthier lifestyle choices are obligatory. Conveying the importance of these measures can be very difficult.

Successfully treating a cooperative patient can prove similarly difficult, as the appropriate herbal formula selection is highly important. Initially, Tian Ma Gou Teng Yin was utilized for Patient 1. Given the patient's LV yang rising diagnosis, the formula was indicated. Patient 1 reported a reduction in some of her symptoms (eye complaints, headaches), but there was no documented change in her blood pressure. As a result, Tian Ma Gou Teng Yin was replaced with Wu Ling San. Wu Ling San's diuretic function acquired great results within a short period of use. These results were later replicated in both Patient 2 and Patient 3.

This information is of significance as it may help in the treating of this highly common condition. In addition, it may help avoid heart attack and stroke.

## CASE STUDY: Acute Cholecystitis

Marlena Pecora MSAOM EAMP LAc

### OVERVIEW

70-year-old female presents with acute abdominal, chest and scapular pain, vomiting and diarrhea. At the local hospital, she was diagnosed with acute cholecystitis via labs and ultrasound. She received anti-nausea medication and was turned away for further treatment. After 7 treatments using acupuncture and Chinese herbal medicine, the patient's pain improved 90%, and she had complete resolution of vomiting, nausea and diarrhea.

### SUBJECTIVE

Patient presents with severe abdominal, chest and scapular pain. Onset occurred 2 weeks prior with an increase in severity 4 days ago. The pain in the abdomen is achy, and at times sharp in the upper right quadrant, and radiates across the abdomen. The chest pain presents behind the sternum, and radiates to the scapular region. Pain is worse with deep inhalation, and affects her daily activities. Patient reports whole body pain and feeling feverish. Her body feels heavy and she lacks appetite. She experienced nausea and 6 bouts of vomiting in the last 2 days. Her stools have been loose, and darker in color for the last 2 days. 10 days prior to her visit to the clinic, she had been evaluated and treated at the local hospital for the same severe pain, nausea and vomiting. She reports being diagnosed with gallstones, and treated with anti-nausea and asthma medication. The patient reports being told she was too old for surgery. Prior to the acute symptoms, she had been eating a diet of rice, lentils, vegetables and meat, a diet high in oils and fats.

### OBJECTIVE

The patient appears physically uncomfortable and distressed. She has a dull gray pallor, orbital edema, red eyes and a flat affect. Sitting slouched in the chair, her responses are short and eye contact is minimal. Her breathing is labored and slightly rapid. Patient displays involuntary guarding of the upper abdomen. There is severe pain upon mild palpation of the upper right and left quadrants of the abdomen. Murphy's sign is positive upon first visit (deep inspiration exacerbating pain during palpation of the upper right quadrant, halting inspiration). The back pain is moderate upon moderate palpation around the scapula region. Vital signs at first visit are slightly elevated. Blood pressure is 150/95 mmHg, pulse rate 115 beats per minute, respiratory rate of 27 breaths per minute, temperature 99.5 degrees fahrenheit and 93 spO2.

Patient's tongue is very pale and puffy, with gray, scalloped edges, especially on the right side, with a thick, greasy yellow coat. Her pulse is rapid and slippery.

The patient brought in medical records from her prior visit to the local hospital. Labs reveal elevated serum bilirubin total and direct and serum amylase levels. An ultrasound (USG) of the abdomen reveals a calculus of 13mm in the gallbladder lumen.

### ASSESSMENT

DX: Acute cholecystitis

TCM DX: Damp-heat in the Liver and Gallbladder; Underlying SP qi deficiency with damp accumulation; LU qi deficiency



### PROGNOSIS

Acute cholecystitis usually subsides within 2 to 3 days, and resolves within 1 week in 85% of patients. Due to the patient's age and lack of resources and history of asthma, a routine cholecystectomy was not performed during her hospital visit. Complications of acute cholecystitis include an infected gallbladder progressing to gangrene, or perforation of the gallbladder if left untreated. The patient is from a small village that lacks healthcare. She travels 2 hours each way to the clinic. With proper monitoring of the patient's condition, acupuncture and Chinese herbal medicine treatments, the patient's severe pain and acute symptoms will likely resolve within 6 treatments.

### INITIAL PLAN

Patient is to be treated at clinic 3 times per week for 3 weeks. Monitoring of patient's vital signs and symptoms to be assessed at each visit. Focus on reducing pain, inflammation of gallbladder, and preventing further complications. Acupuncture and Chinese herbal medicine, with focus on draining damp-heat from foot Shaoyang channel, and moving qi and blood. If symptoms do not reduce at each treatment, or vital signs worsen, patient will be referred to the hospital for complications of acute cholecystitis. Nutritional education to be incorporated into treatment.

### TYPICAL TREATMENT

Acupuncture: Dannagxue, right GB34 and right GB40 with electro-acupuncture 5Hz continuous; LV2, UB19, UB18, UB20, ST40, LV14, GB44, GB40, GB21, REN10, REN12, Ling Gu, Da Bai and left auricular LV/GB point

Cupping: Stationary cupping along Bladder channel from cervical to mid-thoracic region x 8 bilateral

Chinese herbs: The patient is treated with Chinese Herbal Medicine.

At the first visit, she is given Da Chai Hu Tang, 8 tea pills TID for 14 days. Ban Xia Xie Xin Tang is added at the fourth visit, 3 capsules TID for 12 days.

Lifestyle advice: Nutritional recommendations of a low fat, high fiber diet are discussed. Patient is advised to incorporate more turmeric and mint tea into diet. In Chinese herbal medicine, turmeric rhizome is known as Jiang Huang. It invigorates the blood, reduces blood stasis, reduces pain, and drives qi downward. Pharmacologically, turmeric acts as an anti-inflammatory, anti-hyperlipidemia, anti-bacterial and hepatoprotectant agent. It is easily accessible in the region of Nepal in which the patient lives. Mint is to help reduce pain with its natural anti-spasmodic effects, and grows abundantly in the region.

### **OUTCOME**

The patient showed progressive improvement throughout all 7 treatments. At treatment 7, the patient experienced a total of 90% reduction in abdominal and scapula pain, with complete resolution of chest pain. Patient reported her digestion as good, with no gas or bloating, and a complete resolution of nausea, vomiting and diarrhea. Patient's affect was brighter, she was talkative, smiling and made full eye contact. Her tongue appeared less puffy and greasy, and her pulse less rapid. All vital signs were improved, blood pressure 140/95 mmHg, pulse rate 95bpm, respiratory rate 22 bpm, and 95 spO2.

### **CONCLUSION**

This case was significant because of the severe pain with which the patient presented, and her lack of options. The patient received 7 acupuncture and Chinese herbal medicine treatments in 2 and a half weeks. She experienced 90% reduction in pain with complete resolution of diarrhea, nausea and vomiting. Due to the patient's age, economic standing and past medical history, she was unable to have a cholecystectomy. She received anti-nausea and asthma medication, and was turned away for further treatment at the hospital. Acupuncture and Chinese herbal medicine helped to reduce her pain, systemic symptoms, and improve her overall quality of life.

Chronic cholecystitis, long standing gallbladder inflammation commonly due to gallstones, is a potential future complication. To help prevent future complications, management of the gallstones themselves is necessary. A modified diet of less fats and oils and more vegetables is recommended. Continued treatments with acupuncture and Chinese herbal medicine is also recommended. The gallstone, and gallbladder function, should be reevaluated by ultrasound and labs to monitor progress.

## Case Study: Atrophic Vaginitis with Recurrent Urinary Tract Infections

Jacqueline Bailey LAc MACOM Dipl OM RN

### OVERVIEW

57-year-old post-menopausal female presents with constant burning uterine and bladder pain for 3 years. Allopathic care has been unsuccessful in diagnosing and providing relief of symptoms. In using combination therapy of acupuncture, Chinese herbs and western antibiotics, the patient has had a marked decrease in burning sensation and uterine pain, and almost complete cessation of accompanying symptoms in 10 treatments.

### SUBJECTIVE

The patient presents to the clinic with a chief complaint of "burning uterine pain." The pain has been constant for 3 years and is accompanied by back pain, dysuria and dyspareunia (painful intercourse). Other comorbidities include gastritis, burning urination with a history of urinary tract infections (UTIs), and previous kidney stones. She was hospitalized in 2011 for nephrolithiasis (kidney stone) and hydronephrosis (water in the kidney) of the right kidney. The patient is 4 years post-menopausal and has 8 children, all vaginal births, with no complications reported. Prior to menopause, the patient took Depo-Provera to regulate her menses. Prior to taking Depo-Provera, the patient experienced bleeding for weeks at a time. There is no evidence of abnormal bleeding or vaginal discharge at present. Urination is frequent and volume is adequate. Patient voids 3-4 times at night. Burning pain is increased just before voiding. Additionally, she suffers from burning on the soles of her feet and night sweats. Otherwise, patient feels cold. Digestion is complicated by gas, bloating and frequent loose stools. Lack of thirst is reported. Skin and eyes are dry and itchy, and vision is sometimes blurry. Temporal headaches and dizziness are also reported. The patient is frustrated with her symptoms, as allopathic care has not provided her with answers or pain relief. In a fit of frustration, the patient destroyed previous medical records containing ultra-sound imaging. Patient was also given vaginal estrogen cream by unknown physician, but stopped using it because it did not help her symptoms.

### OBJECTIVE

The patient is an overweight (estimated BMI is 27.4) and age appropriate 57-year-old female. Her demeanor is pleasant, but tearful regarding her current state. She is oriented and appears to be in relatively good health for her environment. Patient points to her vaginal/bladder region when talking about her uterine pain. Abdominal palpation reveals a cooler lower abdomen, and guarding with tenderness on deep palpation of the left lower quadrant, periumbilical and suprapubic regions. No masses are felt. The upper abdomen is warm to touch. Pelvic exam reveals erythema and dryness externally and inside vaginal canal, with poor skin turgor. Neither discharge nor lesions are observed. A dense pressure can be palpated anteriorly, and patient is reporting tenderness. Cannot rule out prolapse, but no protrusions seen or palpated. Costovertebral angle tenderness present indicating possible renal calculi.

Initial pulse is thin, fast and weakest in the left chi and guan positions. Tongue is pale and swollen, with a yellow, dry coat and peeled in the front.

2011 Chitwan College of Medical Science Reports:



Lab tests: BUN 15.5 (7-25), Creatinine 1.5 (0.7-1.4), BG 107 (less than 100 fasting), Uric Acid 5.1 (2.5-7.5), HGB 10 (11-16% female), Platelets 230K (140K-340K)

Urine test reveals slight abnormalities: Clear yellow acidic urine with epithelial cells (15-20) and pus cells (10-12); Trace levels of albumin

Intra-vaginal ultra-sound (IVU): There is radio-dense shadow in right pelvic region indicating potential abnormality.

Bilateral nephrogram: Shows prompt and symmetrical excretion from both kidneys, which are of normal shape and size. No significant post-micturition residual urine

Impression: Calculus present in right ureter

Medications on discharge: Omnatax (Cefotaxime) 3rd generation cephalosporin 20 mg PO x 5 days (antibiotic), Dolopar (anti-cholinergic) tab x 5 days, Urimax (Tamsulosin) 0.4 mg x 15 days (alpha-antagonist), AZO (urinary analgesic) 20 mg every day for 15 days

Updated:

11/6/2014 pelvic ultra-sound results: Kidneys are normal shape and size, no calculi noted. Bladder is normal, uterus is free of lesions and no endometrial abnormalities or masses visualized. Pancreas and gallbladder normal. Liver is 12.5 cm in length and fatty tissue present. Impression is fatty Liver stage 1.



**ASSESSMENT**

DX: Atrophic vaginitis with recurrent urinary tract infections

DDX: Uterine prolapse, Bladder prolapse, pelvic inflammatory disease, bacterial vaginitis and fibroids

The patient meets high risk requirements for Uterine or Bladder prolapse due to her age, weight and multiple pregnancies. As a result of physical exam, prolapse is not detected, though safety parameters have been established for future prevention. Pelvic inflammatory disease is ruled out because although the patient has a few signs and symptoms, she has no vaginal discharge or fever, and the ultrasound is negative. Endometrial tissue is healthy, and there is no history of sexually transmitted diseases. Talking about such topics in the clinic is sensitive, and pap smears are not readily available to completely dismiss this as a causative factor. Same argument can also be made for bacterial vaginitis. Fibroids are ruled out. Patient has not had abnormal bleeding, and there are no palpable masses. This is further confirmed by ultrasound. Interstitial cystitis is probable, although the cause is unknown. Many believe that there is a defect in the protective lining (epithelium) of the Bladder, resulting in the leakage of toxic substances into the Bladder, causing irritation. Usually, if interstitial cystitis is suspected, there will be an absence of bacteria on the urine culture. In this case, pus is present (bacteria is untestable). Cases exist where interstitial cystitis can exist in the presence of a UTI. In these cases, pain is usually much more severe as in this patient's case. The diagnosis of atrophic vaginitis makes sense because the patient is post-menopausal, which decreases the body's supply of estrogen. This then causes a decrease in vaginal secretions, thinning of the endothelium and predisposes women to mechanical weaknesses. The earliest signs are usually burning or dyspareunia. It can be exacerbated by a superimposed infection, such as a UTI.

TCM DX: Liver/Kidney yin deficiency with heat consuming the fluids, complicated by an underlying Spleen yang deficiency leading to damp

PROGNOSIS: Patient has seen many allopathic doctors over the years with no relief. Due to the fact that the patient has limited funds, and cannot afford further testing to rule out other pathologies or treatment, prognosis could be poor. Patient is very eager, however, to seek acupuncture treatment for as long as is necessary.

**INITIAL PLAN**

Treat with acupuncture and Chinese herbs 3 times per week for 10 treatments before reevaluating. Focus on nourishing Liver and Kidney yin and clearing heat. Increase moisture and decrease pain. Internally use Dang Gui Liu Huang Tang (4 pills TID) to nourish blood and Kidney yin and clear heat.

Typical treatment: A combination of LV8, KD6, P6, P7, SP6, REN2, REN3, KD2, ST28 and ear Uterus, Bladder and Liver points

Alternative treatment points include GB41 (Dai vessel), SJ5, SP9 and GB 34.

Obtain urine analysis and culture to rule out UTI. Encourage patient to consider a pelvic ultrasound to rule out calculi.

**OUTCOME**

The urine analysis and culture revealed acidic, cloudy urine with pus. Bacteria not testable.

Herbal formula was switched to Si Miao San (8 pills TID) for 5 days, and ibuprofen 200- 400 mg every 6 hours was given for inflammation and pain.

Ciprofloxacin 500 mg PO BID was given for 5 days to eliminate suspected UTI. Due to the patient's risk factors for Uterine and Bladder prolapse, a referral was made to physical therapy for pelvic floor strengthening and bladder training.

Pelvic ultrasound was ordered. Calculi was ruled out and image was grossly normal, with the exception of a fatty Liver.

On the final visit, the patient reported burning pain only at the vaginal opening and little pain with urination.

**CONCLUSION**

Patient should continue coming to the clinic for treatments 2 times per week for maintenance therapy to achieve optimal goal of minimal pain, and continue nourishing yin and blood. Continue pelvic floor work to prevent prolapse, and consider the use of vaginal moisturizer during intercourse. Patient is encouraged to use trans-vaginal estrogen cream to increase lubrication and tone, and to empty bladder completely with increased water intake to prevent recurrent UTI's.

Over the course of 10 treatments patient slowly had resolution of symptoms. Constant reminders were given to patient to continue with her pelvic floor exercises despite discomfort. Due to the sensitivity of the case, patient needed a lot of emotional support and privacy in the treatment room. It is important as healthcare practitioners that we provide our patients with the proper environment they need to heal, which in Nepal in a community treatment room, can be challenging. In the United States, 40% of women suffer from this syndrome, and only 25% seek medical attention out of fear of embarrassment ([www.aafp.org](http://www.aafp.org)). In rural Nepal, education and access to healthcare is very limited, and women are encouraged to keep such topics suppressed. This case demonstrates the difficulty of working with the female population of Nepal on a sensitive topic, as well as challenges with language, interpretation and lack of resources.

## Case Study: Autism Spectrum Disorder

Marian Klaes LAc

### OVERVIEW

20-year-old male patient presents with decreased mental capacity, which his mother states has been present since birth. He lacks verbal communication skills and his mother states he is prone to angry outbursts. Within 5 acupuncture treatments, he is less agitated, his violent outbursts have decreased, and he is helping around the house, which he has not previously been doing.

### SUBJECTIVE

20-year-old male patient presents with obvious communication problems, and decreased ability to understand and follow verbal communication. His mother answers questions for him. She states he has been this way since birth, and then points to his chest and states "it was not properly formed." He is prone to angry outbursts, and his mother advises caution when touching him. She does not think he will allow any needles to be inserted. Due to his tendency to physically strike people in an angry reaction, his mother is concerned about his being touched too much during the treatment. The outbursts are random. He is capable of taking himself to the bathroom, has a daily bowel movement, and occasionally has undigested food in the stool. His urine is clear to yellow, depending on how much water he consumes. His appetite is poor. He has been taken to other doctors who have prescribed medication, but the mother reports difficulty in getting him to comply. When he has taken it, the medication does not seem to help, so has been discontinued.

### OBJECTIVE

On the initial visit, the patient appears to be very agitated, and his eyes dart around the room as he walks through. His mother holds his arm to physically lead him in and direct him around the clinic. After he is seated, he continuously turns around to look out the window so his chair is turned to allow him to focus on the activity outside, which calms him slightly. Due to his mother's concern about touching him too much, pulses are palpated lightly. They are fast and full. He is warm to the touch. He is partially uncooperative with tongue diagnosis, but he does open his mouth and curls his tongue upwards. Sublingual veins are engorged and purple. He is agitated, and swats at anyone who is standing too close. At times, the interpreter stands outside the window to distract him and keep him visually occupied.

His mother accompanies him on each visit to answer questions, and to provide assistance with bus travel. They travel 1.5 hours each way to get to the clinic, so regular treatments are somewhat of a challenge.

He is frail in appearance. Blood pressure is not taken as he does not want the compression on the arm. His mother points to his chest, makes motions with her hand and tries to describe the appearance of the chest. The shirt is not removed, however from the description it is possible he may have pectus excavatum, which is the most common congenital deformity of the anterior chest wall. Several ribs and the sternum grow abnormally, producing a caved-in or sunken appearance of the chest, which is consistent with how she is describing him. Gentle palpation of the chest and sternum do not confirm a deformity.



### ASSESSMENT

DX: Autism spectrum disorder (ASD)

Autism is characterized by lack of eye-to-eye contact, impairment of facial expression, delay in or total lack of speech, repetitive mannerisms, and lack of social development with aggression, irritability, hyperactivity, volatile emotions, temper tantrums, short attention span and obsessive-compulsive behavior.

TCM DX: Kidney essence deficiency, Spleen qi deficiency with fire harassing the heart

In Asia, autism is typically classified as a delayment disorder. In Traditional Chinese Medicine, it is known as one of the 5 delays, which are observed in the areas of standing, walking, hair growth, teeth eruption and speech. This type of brain disorder is viewed in TCM as an energetic dysfunction, an imbalance of yin/yang, and an imbalance of mind and body functions.

Reason and awareness, which are strongly affected by autism, are primarily ruled by the Heart, Spleen and Kidney. The Heart holds the mind or spirit and rules the mental functions including the emotional state. The Spleen is linked to the mind's ability to study, memorize and concentrate. Kidney qi controls long-term memory. Autism treatment includes eliminating the phlegm as phlegm misting the mind leads to dull wit, incoherent speech, mental confusion, lethargy and decreased

attention span. The condition of phlegm fire harassing the Heart presents as disturbed sleep, talking to oneself, uncontrolled laughing or crying, short temper and tending towards aggression.

**PROGNOSIS:** It is not anticipated the patient will recover and be fully functioning. The purpose of treatment is to calm the patient, reduce agitation, reduce the number and intensity of angry outbursts, improve sleep and hopefully improve cooperation.

### **PLAN**

It is recommended he be treated 2 times per week for 5 weeks before reevaluating. The focus of treatment is to tonify the Heart blood, qi and yin, clear Heart heat and tonify Spleen qi and Kidney essence.

Scalp acupuncture is initially utilized, as autistic patients often have a difficult time following directions and being cooperative, so body acupuncture is not always an ideal method. Scalp acupuncture is effective because so many key nerve points can be found on the scalp, and it is less painful and less visible, making it easier to avoid panic. With scalp acupuncture, patients do not need to lie down and stay motionless. This is ideal for autistic patients.

**Typical Treatment:** Start with scalp points. As patient becomes calmer, add press needles and ear seeds to protocol. Scalp work is performed with the central line, verbal communication, frontal lines and GV 16.

**Alternate Treatment:** Press needles added at PC6, HT7, HT3 and ST40. Ear seeds are placed on the Heart, Point Zero and Shen Men. Mild massage is added to the Shaoyang channels of the arms and legs.

### **OUTCOME**

Following the initial treatment, the patient's mother noted he seemed calmer, and appeared to be sleeping better. By the third treatment, it was noted he was much calmer in the treatment room, and did not seem disturbed when his arms and legs were touched. After one point, he actually laid down on the floor in a very calm and relaxed state.

Each treatment seemed to be making a difference. By the fifth treatment, he was helping to sweep the floor, feed the chickens and cut the grass, which he had previously not been doing. "Cutting grass" in Nepal means using a hand scythe, manually cutting the grass in small areas at a time while on your hands and knees. Due to the distance and difficulty of travel, after 2 weeks of care, visits were reduced to once a week.

By the fifth treatment, the patient appeared to be doing much better. His mother stated he was much calmer. She also said he had been speaking a few words, which he used to do but had stopped trying. From a practitioner standpoint, relative to the initial visit and after 3 weeks of care, he was much less agitated, more cooperative, and agreed to stick out part of his tongue for the first time in clinic for tongue diagnosis.

### **CONCLUSION**

The patient experienced a notable reduction in agitation and was calmer with each session. This was noticed by the practitioners and interpreters as well.

It is recommended he continue with 1 treatment per week for 4-6 weeks before transitioning to 1 treatment every 2-3 weeks. If improvement continues, moxa and possibly body needles could be added to the treatment strategy. Although a full recovery is not expected, it is anticipated that with continued care he will have a significant reduction in behavioral problems, be more helpful with home duties, and possibly learn to speak a few words. It is very apparent that acupuncture treatments are having a positive influence on this patient, which is helpful to both him and his mother.

## CASE STUDY: Spastic Quadriplegic Cerebral Palsy

Beth Fitzgerald DPT

### OVERVIEW

Severely malnourished and non-ambulatory 11-year-old female presents with increased tone and spasticity in all extremities, frequent seizures, and currently requiring assist for all mobility. Patient was seen for a total of 10 physical therapy treatments with significant improvement in passive range-of-motion, moderate improvement in posture and spasticity, slight improvement in active range-of-movement, and a 50% decrease in seizures.

### SUBJECTIVE

11-year-old female patient is carried into clinic with significant tightness in all extremities. Per caregiver report, she has minimal social interaction, an inability to feed or dress herself, toilet or ambulate, and currently requires assist for all activities of daily living and all mobility. Caregiver reports a seemingly normal development until the age of 2 when "all of her muscles got tighter" and began to alter her mobility. She was able to crawl, ambulate and communicate. However, between the ages of 2 and 5, she had a pronounced increase in muscle tone, paralysis, and began having difficulty with all mobility. At 5 years old, she started using a cane to ambulate and progressively stopped walking and speaking. A vague history, slowly gathered over the course of multiple treatments, includes a difficult birth, which required forceps, 21 days in a paralysis ward around 6 years old with no reported improvement, and a subsequent lack of social interaction. On the 6th visit, it was revealed that she was neglected by her parents and confined to her bed for extended periods of time. The current caregiver is a distant relative as the parents do not want to care for her unless she is able to feed and toilet herself. The caregiver's goal is for the patient to move better and walk more.

### OBJECTIVE

Patient presents to clinic severely malnourished and underweight, non-ambulatory, non-verbal, aside from occasional grunting, and productive cough due to recent cold and fever. She exhibits decreased eye contact, flat affect, drooling, frequent, small, full-body seizures, with all extremities having increased tone and spasticity. In supine, lower extremities (LE) are flexed, abducted and externally rotated (ER) with increased muscle tone and spasticity. Spasticity is the result of an upper motor neuron lesion and presents as increased resistance to passive stretch that is velocity dependent. Upper extremities (UE) are flexed, abducted and ER with tone and spasticity. Right side is more affected with no volitional control. Left side presents with minimal volitional, but uncoordinated, movement. The patient's right hand is contracted in flexion, pronation and extreme ulnar deviation. Seated, she is able to balance with LE's abducted past 90 degrees and with standby assist, someone standing next to and guarding, but not physically assisting, for safety. Standing, she requires 25% assist to maintain balance and prevent a fall as she is unable to support herself with her UE's, and unable to bear weight on the right LE. Spasticity is increased in both sitting and standing, most notably in her right LE, which is abducted, internally rotated (IR) and flexed with foot contracted in plantar flexion, inversion and supination.



### ASSESSMENT

**DX:** Spastic quadriplegic cerebral palsy

Spastic quadriplegia is defined by spasticity of the limbs, rather than strict paralysis. It is distinguishable from other forms of cerebral palsy in that those afflicted with the condition display stiff, jerky movements stemming from hypertonia of the muscles. The primary effects of cerebral palsy are impairment of muscle tone, gross and fine motor functions, balance, control, coordination, reflexes and posture. Swallowing and feeding difficulties, speech impairment, and poor facial muscle tone can also indicate cerebral palsy. Associative conditions, such as sensory impairment, seizures and learning disabilities can also occur. When present, these associative conditions may assist with a clinical diagnosis of cerebral palsy.

**DDX:** Diagnosis is complicated by lack of past medical history, parents not currently being involved in care to clarify development, and by exacerbation of symptoms secondary to lack of care and stunted growth. Differential diagnoses consist of muscular dystrophy, acquired brain injury and Rett syndrome.

Muscular dystrophy is a group of diseases that weaken the musculoskeletal system. Although more common in males, it can occur in females and is characterized by progressive muscle weakness and wasting, poor balance, atrophy, scoliosis, frequent falls, joint contractures, inability to ambulate and wasting of the muscular system. Patient's history and initial disease presentation per caregiver report has many of these characteristics. However, muscular dystrophy does not typically involve spasticity. This diagnosis is further ruled out as details of the birth are learned.

Rett syndrome is characterized by a period of normal motor development followed by developmental stagnation and then regression of motor and language abilities. Onset typically occurs between 6 and 18 months of age with subtle developmental delays, developmental progress and then stagnation, followed by developmental regression. Hand wringing is a classic symptom and is often confused with autism. Rett's can also be confused with cerebral palsy. Regression is actually rarely seen with cerebral palsy and spasticity is uncommon with Rett's. Initial history gathered exposes a period of normal development followed by regression. This diagnosis is considered due to the reports of regression around 2 years of age. It becomes clear, however, that the regression seen with this patient is most likely due to neglect. Rett Syndrome is further ruled out secondary to spasticity.

Acquired brain injury (ABI) is brain damage caused by events after birth such as stroke, brain tumor, infection, hypoxia or ischemia, and can result in an upper motor neuron lesion possibly resulting in spasticity. Without a detailed and accurate history, it is not possible to rule out an ABI. The patient's caregiver reports a difficult birth, which is likely the cause of the initial injury. However, with the history of abuse, it is possible that the symptoms were exacerbated by events after birth.

## PROGNOSIS

Patient's prognosis is poor due to the severity of her condition, and the general lack of awareness and education about neurological diseases on behalf of her caregiver and the community. The patient lives with a distant relative, and requires lengthy travel to clinic where treatments can only help manage symptoms. Sadly, there is a prior history of abuse and neglect, and currently there is no other support available at home. The level of care needed will only increase as the patient gets older, as will her risk for other illnesses and infections.

## INITIAL TREATMENT

The movement patterns of proprioceptive neuromuscular facilitation (PNF) to bilateral UE's and LE's are utilized to decrease tone and spasticity. The goal is to facilitate more functional movement patterns, thereby increasing the patient's ability to participate in activities of daily living, such as self-feeding, mobility and toileting, thus decreasing the caregiver burden. The patterns of movement associated with PNF are composed of multi-joint, multi-planar, diagonal and rotational movements of the extremities with the emphasis on decreasing spasticity and increasing range-of-motion. Movements are initiated passively, progressed to active-assisted, and eventually active if patient is able to assist in a controlled movement. Passive range-of-motion (PROM) to right wrist and hand is performed to prevent further contracture development. All exercises are performed bilaterally and slowly, with a constant

smooth motion for 5 minutes to each extremity, allowing the muscles to relax and to decrease tone. Seated and standing balance training is performed with emphasis on trunk control, posture, alignment and weight shifting to the right LE. Weight bearing can be very effective at decreasing tone. Progress is made towards prone over a bolster and quadruped (weight bearing through elbows and knees) to facilitate different body positions, in addition to weight bearing through UE's, primarily the elbows. Weight bearing exercises are also used to increase bone density, improve circulation, increase strength, promote Lung health and reduce tone and spasticity. Neurological reeducation exercises, such as PNF, are performed to decrease spasticity and facilitate motor control to enhance patient's ability to move independently and increase functional mobility. Patient is being seen 2-3 times per week to decrease spasticity, promote increased range-of-motion, decrease risk for further contractures, increase mobility, and for continued family training and education. She is also receiving acupuncture after each physical therapy session. Reassessment is to be completed after 6 visits, and appropriate family training and education is initiated. Initial treatment is selected based on severity of presentation, knowledge of limited resources, and family's education level.

## OUTCOME

Patient was treated 10 times and had significant improvement in passive range-of-motion, moderate improvement in posture and spasticity, slight improvement in active range-of-movement, and a 50% decrease in seizures. Patient had a moderate reduction in spasticity during each session, significant increase in passive ROM, and slight improvement in active ROM (most noted in UE's) between treatments. She experienced an overall improved affect and social interaction throughout the course of the treatments. She was able to reach out towards people with her left UE, and often able to touch someone's nose with verbal cues. She could sit with a narrower base of support for up to 30 minutes with supervision only, and stand with contact guard assist (previously requiring physical assist). Additionally, she had some use of her left UE for balance. Patient tolerated prone over bolster with weight bearing and engagement of UE's for 15 minutes for facilitation of back extensors and head control, also allowing gentle percussion to the back to support respiratory health, and decrease risk of current cough progressing to pneumonia. Family was encouraged to vary patient's position frequently to increase strength, mobility, Lung health, and opportunity to interact with different environments.

Nutritionally, the patient was encouraged to increase fluids throughout the day and include softer, higher caloric foods for overall increased intake. Extensive caregiver education about cerebral palsy was initiated to increase understanding of the disease and how to best work with, and help, the patient for both patient and caregiver benefit as well as long-term prognosis. The caregiver was highly encouraged to seek acupuncture treatments herself due to the heavy caregiver burden. Training was completed with the caregiver to continue PNF and standing exercises to maintain newly-gained range-of-motion, facilitate weight bearing, reduce spasticity and minimize pain.

This case was complicated simply by the complexity of the diagnosis and high level of care required. Information gathered on the sixth visit revealed significant neglect, further reinforcing the focus of treatments to be caregiver education, a simple home exercise



carry-over into daily life will occur, as the patient must fully rely on her caregiver.

As the case progressed, it became clearer to me that the most important components were not the actual interventions during treatment, but developing a relationship and providing an environment where the caregiver was open to education, assisting in establishing appropriate connections, and helping to establish relationships for continued support. The burden lies on the caregiver to continue to bring the patient in for treatments, to be open to further education and training, and follow through with a home exercise program.

program, and to initiate a search for possible support groups. A referral was made to Cerebral Palsy Nepal, an outreach program offering therapeutic and practical support to 15 of the 75 districts in Nepal. Possible support includes home visits and a mobile team who assist with therapy, acquiring equipment, practical guidance and emotional support to patients and their families. During the initial visit, we discussed methods to increase patient's food intake, particularly healthy fats, setting up an appointment with a doctor to address possible medications, specifically to manage seizures, a more appropriate and supportive chair for her home to increase interaction with the environment, and perhaps most importantly, supporting and educating the caregiver.

## CONCLUSION

This case was challenging for me at many levels. From the initial evaluation it was apparent that the medical history was extensive, but vague. Though confident with the diagnosis, it took multiple visits to unravel a more complete history. It was important to focus on treating the patient, but also ensure the caregiver could see the benefit so she would continue to bring the patient into the clinic. I tried to provide an environment where she felt supported and open with the patient's history, as the caregiver was initially guarded and defensive.

Though the patient's prognosis was poor, I was surprised how much improvement I saw despite the severity and duration of her disease. With minimal prior intervention, I was able to clearly see the effects of my treatment. I was able to make moderate to significant progress with the patient's active and passive range-of-motion, seated and standing balance, and overall reduction in tone and spasticity. The patient appeared more comfortable, was engaging with the practitioners and actually smiled during the last treatment. Despite this progress, life in rural Nepal is challenging even for a healthy and able-bodied individual, and it is difficult to predict how much

## CASE STUDY: Tietze Syndrome with Anxiety and Insomnia

Susana Correia MSTOM LAc LMT

### OVERVIEW

26-year-old female complains of bone pain at the costochondral junction of the right 2nd rib, insomnia and anxiety. After 12 acupuncture treatments and the use of Chinese herbal medicine, the patient reports no anxiety or insomnia, and a 70% reduction in pain. After careful examination and a series of biomedical tests and imaging to rule out a critical condition, the patient is optimistic and continues to see improvement.

### SUBJECTIVE

Patient presents with deep, focal, bone pain on the superior surface of the sternal end of the right 2nd rib for 10 days. She reports no initial injury or history of trauma. At approximately the same point in time as the pain began, the patient's brother, the primary caregiver for their parents, moved abroad, increasing her worry and stress levels. She has pain with inhalation and reports difficulty exhaling with a "stuck" feeling in her airway. Because it hurts to breathe, she is experiencing inspiratory splinting (inability to take a full breath). She has increased shortness of breath (SOB) and pain with prolonged walking. She feels more intense pain with movement, making it especially difficult for her to work in the field as a farmer and care for her 3 children; ages 6 months, 4 and 7 years old. She is breast-feeding the youngest child. She feels fatigue and weakness, has a decreased appetite and weight loss, occasional palpitations and is more frequently sick.

She has no history of tuberculosis, asthma, bronchitis or chronic cough.

The patient also reports insomnia and anxiety for 1 year. She states that it can take hours to fall asleep, and she only stays asleep for 2-3 hours at a time. Pharmaceuticals have helped in the past. She tends to worry, which started after the birth of her first child. Her anxiety manifests as chest tightness and heaviness, and is exacerbated by walking for long periods or carrying heavy loads.

### OBJECTIVE

The patient appears in distress. Her complexion is ashen in color and her clothes unkempt. She appears to have a healthy body mass index.

The painful area is approximately 3-4 mm in length in the area of the costochondral junction of the right 2nd rib. Upon palpation, redness, swelling and tenderness are present on the superior surface of the rib. There is a small lesion, lateral and superior to the site of pain.

Blood pressure is 110/ 75. Heart rate is 77 BPM. Oxygen saturation is 98%.

No crackles, rales, wheezing or friction rub noted upon lung auscultation.

Tuning fork vibration used to rule out fracture. All ribs appear to be in correct alignment.

Pulses are thin, wiry and choppy. Tongue body is narrow, puffy and depressed in the center. Tongue color is pale red with a red tip that curls under. Tongue coat is thin yellow and the sides are peeled.



### ASSESSMENT

**DX:** Tietze syndrome, insomnia and anxiety

**DDX:** Tietze Syndrome: Inflammation and swelling of the cartilage of the chest wall, usually the 2nd or 3rd rib. It causes chest tightness and severe pain, which may radiate to the arm or shoulder. The condition usually comes on abruptly and is self-limiting within several weeks, but can also become chronic and last many years. The root cause is yet unknown. It is associated with upper respiratory tract infections. It has been known to be precipitated by stress, excessive exercise, chest wall injury and straining (ie cough).

**Costochondritis:** Inflammation, but no swelling at the costochondral junction; Usually involves the 4th, 5th or 6th rib

**Intercostal Neuritis:** Inflammation of the nerve that runs between the ribs. The patient experiences pain along the superior surface of the bone, not in the intercostal space.

**Pleurisy:** Inflammation of the Lung lining due to infections like TB or pneumonia. Pleurisy can be differentiated by the presence of friction rub, which is not present. Point tenderness on palpation is also not

characteristic of pleural inflammation.

Osteomyelitis: Infection in the bone; Patient does not present with fever or chills, which would be expected with a bone infection.

Chest Wall Tumor: Swelling or protrusion of the chest could be the result of either a primary malignant or benign tumor, or a direct malignant invasion from an adjacent structure, such as the lungs, breast or pleura. Chest x-ray does not show evidence of a chest wall tumor. Breast cancer, the most common cancer to metastasize to the bone, is unlikely as no masses or lumps in the breasts or axilla are found upon examination.

Extrapulmonary Tuberculosis: Mycobacterium infection outside of the Lungs. It is most common in people with weakened immunity and those who have latent pulmonary TB. The most common sites of infection are the lymph nodes, pleura and osteoarticular areas. Lymph TB is unlikely since the patient does not present with chronic non-tender lymphadenopathy. Pleural TB is unlikely as the patient does not present with acute cough. Skeletal TB is a possibility, but unlikely due to the lack of a true discharging sinus of the chest wall, rarity of bone TB in the ribs, and mismatched demographic.

TCM DX: Local qi and blood stasis. Liver qi stagnation with blood deficiency leading to disturbance of shen

#### PROGNOSIS:

Due to the complexity of the rib pain presentation, various pathologies need to be ruled out with time and testing before a clearer prognosis can be determined. Resolution of anxiety and insomnia is expected with acupuncture and herbs.

#### INITIAL PLAN

Treat patient with acupuncture and herbs 2-3 times per week for 8 treatments before reassessing. Move local qi and blood to release stagnation and help reduce rib pain. Focus on building blood in order to house and calm the spirit, and move qi in order to soothe the Liver and quiet the spirit.

Typical treatment: SP4, PC6, KD16, KD19, KD24, KD25, KD26 and KD27

Additionally, LV3, LI4, LU7 and REN17 are intermittently used.

Xiao Yao Wan is the herbal formula prescribed (8 teapills TID) to smooth the flow of Liver qi and tonify blood.

#### OUTCOME

After 8 treatments with acupuncture and herbs, the patient reported resolution of anxiety, insomnia and palpitations.

A tuberculin skin test (PPD) was ordered to rule out latent pulmonary TB causing bone TB. The resulting induration was measured at approximately 14 mm. An induration of over 10 mm is considered a positive result.

The patient was referred for a chest x-ray to confirm the diagnosis of TB. Report of findings did not show pulmonary TB and the rib appeared unaffected.

The patient was referred to the local health post to get a CBC to check for inflammatory markers, which would help confirm the diagnosis of Tietze syndrome.

Turmeric was prescribed (1 teaspoon TID) as an anti-inflammatory to help confirm the diagnosis of Tietze Syndrome. The patient reported positive results from using turmeric.

After 12 acupuncture treatments and continuous use of Xiao Yao Wan, the patient reported a 70% reduction in rib pain that was only experienced intermittently when sleeping on the affected side or after heavy activity. There was no longer SOB, nor any difficulty with breathing, weakness or fatigue.

#### CONCLUSION

This case demonstrates the challenges of primary health care in rural Nepal. Diagnosing serious conditions often requires testing and resources that are not readily available. More importantly, this case illustrates how you can overcome such difficulties by careful observation, research and establishing safety parameters. Because the patient's condition continuously improved after the 3rd visit, and she did not develop any ominous symptoms such as fever, chills, lymphadenopathy or cough, it is most probable that the patient does not have a serious, underlying condition such as cancer or TB.

Through diligent research and astute observation of the patient, I believe that the patient's rib pain was precipitated by the stress of her brother leaving the country, along with excessive work in the fields as a farmer. It is possible that this patient, like many people in Nepal, had been exposed to TB, but is not an active carrier. The fact that she has been steadily improving with treatment, including weight gain, improved appetite and a reduction in fatigue and pain, makes me believe that this condition may be a case of stress and strain-induced inflammation and not a more severe illness.

Acupuncture is a powerful healing resource for both somatic and emotional pain. As practitioners, we do need to be careful we are not covering up any deeper life-threatening diseases by relieving pain. Though it is important to consider all of the more serious possibilities, and to be aware of which diseases are endemic in your environment, it is also important to have confidence in your skills as a rural primary health care provider. Being overly fearful of the "what-ifs" can hinder your effectiveness in treating what is right in front of you.



## CASE STUDY: Painful Ulcerations of the Throat with Chronic Sinusitis

Helena Nyssen BA AppSc (TCM)

### OVERVIEW

28-year-old male presents with chronic sinusitis, nasal blockage, throat pain and ulcerations for 18 months. The patient also presents with gastric pain. After 9 acupuncture treatments over the course of 1 month, the sinus blockage is 100% resolved, with a complete resolution of subjective throat pain and ulcerations upon inspection. The gastric pain is significantly improved.

### SUBJECTIVE

The patient presents to the clinic reporting symptoms of throat pain beginning 18 months prior to the first consultation at this clinic, and becoming progressively worse. The pain is constant, and worse at night. Consumption of hot, salty or spicy food or drink aggravates the pain. Cool drinks are relieving.

The patient also presents with complete sinus blockage, with an inability to breathe through the nose. He daily expectorates a small amount of yellow, watery phlegm from the nose. He finds smoky environments irritating. He experiences temporary relief with the use of saline solution and a neti pot.

He reports epigastric pain that is worse with cold foods, and bloating every day that is relieved by belching. He experiences occasional acid reflux and diarrhea, and night sweats, anxiety, lower back pain, poor energy, weakness and the occasional headache. All symptoms flare up simultaneously.

He has never smoked, although he chews tobacco daily. He occasionally drinks alcohol. The patient uses Rynex (cough suppressant, decongestant and antihistamine), as needed, to relieve his symptoms.

### OBJECTIVE

The patient is noticeably congested, with a constant sniff and breathing through the mouth. He has no fever or sweating, and a normal facial complexion without flushing. An endoscopy performed 18 months before presentation to the clinic was negative for any gastrointestinal ulcers. Upon visual inspection, there are multiple ulcers at the back of the throat (on the oropharynx and posterior soft palate). The ulcers are small in size, approximately 1-3mm in diameter, red and swollen at the edges, with a white interior. There are no ulcers visible within the oral cavity, and the tonsils appear only slightly swollen, but without ulcers or exudate. The uvula itself is swollen and deviated to the right. The lymph nodes of the neck show no swelling or pain on palpation. Visual inspection of the nose reveals small polyps bilaterally. The polyps are approximately 0.3cm across, but not large enough to block the nasal passage. They are pink in appearance with no exudate.

Pulse: Rapid and thready

Tongue: Big, sticky, deep yellow coat

### ASSESSMENT

DX: Chronic sinusitis and upper respiratory tract inflammation;  
Possible chronic bacterial or viral infection, such as streptococcus or mononucleosis



TCM DX: Kidney yin deficiency with deficient heat rising and scorching the Lung

PROGNOSIS: With regular acupuncture treatments, reduction of throat pain and congestion is expected within 10 treatments. The nasal polyps are only treatable with surgery. Because there is no pathological findings within the gastrointestinal system, it is expected that positive functional improvement can be gained with acupuncture and dietary changes.

### INITIAL PLAN

Treat with acupuncture 2-3 times per week for 10 treatments before reassessing.

Focus on reducing the heat in the throat and tonifying the Kidney yin.

Base Rx: KD7, KD6, LV3, ST44, LI4, KD3, PC6, LU7, LI20, Bitong, as well as threading the REN and Stomach channel

Advice: Stop chewing tobacco, avoid smoky environments, keep using neti pot as needed, ensuring the water is boiled clean first.

### OUTCOME

After 9 treatments, the patient reported major changes in his throat pain, ease of breathing, and gastric pain. He experienced no throat pain at all, eating and drinking was no longer painful, and he could breathe freely through his nose. His gastric pain was relieved by a reported 75%. He no longer experienced coughing or sniffing, but still had some bloating. He discontinued his treatment at this point because he was happy with his level of improvement. The patient generally felt he had more energy. His anxiety had reduced to the point he rarely noticed it, and he no longer experienced night sweats. The throat ulcers had resolved and the oropharynx and tonsils appeared a healthy pink colour, without swelling. The nasal polyps were unchanged.

## **DISCUSSION**

Acute or chronic infection was not considered as thoroughly as it should have been, as the patient had already experienced the symptoms for 18 months upon presentation to the clinic, and did not display signs of fever or swollen lymph nodes. The treatment may have been improved by further defining the cause of his throat pain and ulcerations. Antibiotics may have been helpful in this case. However, acupuncture treatment still achieved a satisfactory reduction in his subjective and objective symptoms.

A TCM diagnosis of Lung yin deficiency could have been explored for a more targeted treatment.

The patient's outcome was improved by his compliance with lifestyle and diet advice, and his commitment to regular treatments (2-3 times per week). This case clearly illustrates the effectiveness of acupuncture for chronic sinus congestion and sore throat.

## Case Study: Bilateral Hip and Low Back Pain

Eliot Sitt LAc

### OVERVIEW

19-year-old male presents with trauma-related chronic hip and low back pain with limits in range-of-motion that interferes with daily life. After 24 acupuncture treatments over the course of 6 weeks, the patient has increased range-of-motion and significant pain reduction.

### SUBJECTIVE

19-year-old male patient presents with complaints of hip and low back pain. He describes the back pain as a dull ache that worsens while bending either forward or backward. He is able to walk fairly comfortably, but it is worse when carrying heavy loads. He experiences occasional tingling down the legs. The back pain began 8 or 9 years ago with a fall from a tree. He landed flat on his back onto a branch on the ground. He lost consciousness for about 5 minutes. After regaining consciousness, he found it too painful to walk. He did not receive treatment at that time. The back pain gets worse while working in a position of forward flexion for extended periods of time.

For the past 5 or 6 years, he has also experienced a gradual onset of hip pain, which prevents him from being able to squat at the toilet or separate his knees enough to straddle a motorcycle. The pain radiates down the anterior and lateral aspects of his thighs. He feels some hip pain while seated in a chair, and resting one ankle on the opposite knee is too painful of a position to maintain. He is also physically unable to place either knee above the other in a seated position. He reports tightness along his anterior thighs, as well as occasional neck and upper back pain along the spine.

### OBJECTIVE

The patient appears in good health and overall good spirits. He is alert with a small build and friendly demeanor. The patient has normal range-of-motion at the waist in flexion, extension, lateral flexion and rotation. The erector spinae are tight with tenderness along the lower borders of the spinous processes of L1 to L5.

Passive hip abduction is restricted to 40 to 45 degrees bilaterally (50 degrees considered normal), with a feeling of intense tightness in the inner thighs. There is tenderness upon palpation at the gluteus medius muscle, particularly on the right, at a point halfway between the greater trochanter and the top of the iliac crest.

The patient is unable to maintain a squatting position for more than a few seconds due to hip pain. The Faber test is positive for pain bilaterally in the initial position of one ankle placed on the opposite knee without downward pressure applied by the practitioner. The pain is felt deep in the hip bilaterally, with additional back pain on the right side near the SI joint. The right leg appears shorter than the left by about an inch, and the right PSIS appears slightly higher. There is tenderness at the SI joints bilaterally.

In the supine position, the right leg appears slightly shorter than the left. Leg length measurements show 29 inches from the prominence of the greater trochanter to the lateral malleolus bilaterally, but 34 and 35 inches from the umbilicus to the medial malleolus on the right side and left side, respectively.

Braggard's test (aka the reinforcing straight leg raise) is positive



bilaterally with tingling appearing at about 70 to 75 degrees and reappearing with passive dorsiflexion at a slightly lower angle. The tingling is felt down the posterior thigh and popliteal fossa. Strong dorsiflexion with the leg fully extended, but not raised, also results in tingling in the popliteal fossa bilaterally.

The Valsalva maneuver results in a tingling sensation in his toes. The piriformis test is negative for tingling sensations, although the position causes discomfort in the hip. DTR's at the patellar and Achilles tendons are normal bilaterally.

He has a wiry pulse, and pink tongue with a thin white coat.

### ASSESSMENT

**DX:** Upon interpretation of the objective testing performed, this patient has multiple structural problems involving the low back and pelvis, including hip joint pathology, sciatica, possible sacroiliac joint subluxation and compensatory muscle tightness of the low back and thighs.

The positive results of the Braggard's test and Valsalva maneuver suggest sciatica caused by a space-occupying lesion in the lumbar spine. Possibilities include intervertebral disc herniation, osteophytes or spinal stenosis. Disc herniation is the most common of these causes and also consistent with this patient's history of trauma. The trauma conceivably could have caused a subluxation of a vertebrae in such a way that it could compress a nerve root. However, no obvious misalignments of the spinous processes are observed upon palpation. Spinal stenosis and the presence of osteophytes are less consistent with the history of trauma and is unlikely in this case due to the patient's young age.

The sciatic symptoms, in this case, may also be caused by muscle tightness in the pelvic area compressing the sciatic nerve. However,

the negative result of the piriformis test suggests that the sciatic nerve is not being compressed by the piriformis muscle, which is commonly involved in sciatic compression due to muscle tightness.

An imaging study of the low back such as an MRI or x-ray would be needed to determine the nature and location of any space-occupying lesion and to make a definitive diagnosis. There isn't severe enough evidence of nerve root compression at L3, L4, L5 or S1 to affect DTR's, as bilateral patellar and Achilles' DTR's respond normally.

Due to the number of years that have passed since the original accident, it is difficult to ascertain the exact nature of the original injury that caused the back pain and radiculopathy. Given that this injury was untreated, it is likely that compensatory muscle tightness, serving to guard the initial injury, has resulted in slow-onset hip pain and subsequent structural imbalance.

TCM DX: Qi and blood stagnation in the Du Mai, Bladder and Gallbladder channels

PROGNOSIS: This patient has responded well, experiencing significant improvement, to previous acupuncture treatment for back pain. He is willing to come in frequently for treatment. The patient is likely to experience pain reduction and increased range-of-motion over the course of treatment. However, because his condition is complex and chronic in nature, he is unlikely to see a full resolution of all of his symptoms.

## PLAN

Treat with acupuncture and/or electro-stimulation 5 times per week for 2 weeks, before reassessing. Focus primarily on hip pain, which has not received previous, direct treatment, and continue to reduce back pain.

Typical treatment for hip pain: GB40, GB34, ST34, SP10, LI4, TB5, GB28, Ah Shi x2 superior to the greater trochanter, deep insertion towards the joint. Electro-stimulation 100/2 from GB40 and GB34 to the Ah Shi points superior to the greater trochanter bilaterally

Typical treatment focused on back and/or neck pain: SI3, BL62, BL60, BL23, LI4, DU20 and Hua Tuo Jia Ji points at tender vertebral levels (often L2-L5)

## OUTCOME

After 24 treatments within 6 weeks, the patient had only occasional, mild back pain, sometimes brought on by carrying heavy loads. He came for many treatments reporting no back pain at all with the majority of the treatments focused on addressing the pain in his hip.

The patient was able to sit in a chair without pain. He could place one ankle on the opposite knee with only minimal pain, which he still felt deep in the hip. He was able to place one knee on top of another, while seated in an even more crossed position, whereas before treatment this position was impossible. The left knee over right knee position was more comfortable than right over left, but he still felt some deep, hip pain on both sides while seated in this position. The patient could now tolerate downward pressure during the Faber test, with significantly reduced pain in comparison to the initial treatment.

The patient was able to maintain a full squat position without pain with both heels flat on the ground, but it was difficult to maintain his balance if his heels were farther apart. He reported feeling much

looser in the thighs and pelvic girdle, with passive abduction showing normal range-of-motion at about 50 degrees.

His apparent leg length on the right from the umbilicus to the medial malleolus measured a half inch shorter than the left side at 34.5 inches instead of a full inch shorter at 34 inches, as was measured in treatment 12. A leveling of the PSIS's was observed.

Braggard's test remained positive bilaterally, but the tingling sensation was reduced by about 70%. He no longer felt tingling during the Valsalva maneuver.

Although the patient's condition was not fully resolved, he experienced an increase in range-of-motion and a significant reduction in pain and overall tingling sensations.

## DISCUSSION

This case was challenging because there were multiple structural abnormalities coexisting without a clear diagnosis. It was initially difficult to decipher where to focus treatment. Because the back pain had already been improving from previous acupuncture treatment, the back pain resolved to a manageable level early in the course of treatment, resulting in an overall treatment focus on the hip pain.

The patient found the hip pain difficult to describe, but the functional limitations were clear. While many people in the west find it difficult to squat because of how often we use chairs and seated toilets, the inability to squat is unusual and inconvenient in a rural Nepali environment, particularly because squatting is the normal position during bowel movements. It was also a detriment to this patient's quality of life that he couldn't sit normally without discomfort prior to treatment.

Continued treatment of this patient with acupuncture would focus on continuing the pain relief of the hip joint with distal Gallbladder points and deep local needling, as well as a continued loosening of the local musculature of the pelvis, low back and thighs. Additional assessment is needed to determine the cause of the leg length imbalance. The nerve root compression causing sciatica should also be more precisely assessed, ideally with an imaging study.

This case study suggests that acupuncture with electro-stimulation can have a significant therapeutic effect on complex, long-standing musculoskeletal conditions, and has the potential to be a valuable therapy in an environment with limited access to diagnostic imaging and allopathic medical care.

## CASE STUDY: Sequelae of Osteoarticular Tuberculosis

Rachael Haley BAppSci (TCM)

### OVERVIEW

A 58-year-old man, of rural Nepal, presents with left hip pain, reduced strength and mobility in his left hip and significant muscle wasting in his left leg. After 30 electro-acupuncture treatments over 6 weeks and Traditional Chinese Medicine, the patient reports a significant decrease in his pain and inflammation levels and improved strength and muscle tone in his left leg.

### SUBJECTIVE

A 58-year-old male presents with chronic, left hip pain with intermittent referred pain into his lateral left leg; either down the iliotibial band (ITB) region or into the lateral lower leg. The hip pain is a throbbing, deep ache, worse in cold/damp weather and at night when he is trying to sleep. He is unable to straighten his left leg in bed due to pain and stiffness. The patient uses handmade wooden crutches to walk without fully weight-bearing on his left leg. He has been relying on these to walk for 6 years. The pain started over 6 years ago with a gradual onset without any history of trauma. The patient reported having an x-ray taken at this time, and repeated hospital visits for tests and prescriptions of western drugs over a 7 month period. After taking these medications (unknown) with minimal improvement, he threw out his medical reports and ceased treatment. After a prolonged period of rest, he was unable to weight-bear through his left leg without significant pain. He reports the x-ray described the joint as having a 'jagged edge.' Prior to the onset of his hip pain, the patient was an active farmer in rural Nepal.

### OBJECTIVE

The patient presents with a slightly depressed demeanor. He is slight in build and stands with either all or most of his weight through his right leg. On observation, the patient's left leg appears shorter, contracted at the hip and knee and has obvious muscle wasting in both the upper and lower leg. When walking to the clinic, he places minimal weight through his left leg, using the crutches as support. Due to postural imbalances, he cannot stand on both legs with equal weight distribution without left hip pain and his right knee having to flex about 30 degrees to get his left leg on the ground. The left iliac crest is visually higher than the right. The right ilium appears to be positioned more anteriorly. On his left hip, around his greater trochanter, there are 5 deep, large scars that are a result of abscesses that erupted after his initial onset of hip pain and hospital visits. The following orthopedic tests are conducted:

FABER's test: Positive on left side

Straight leg raise: Negative on both sides

Thigh circumference is measured 15cm above the superior border of the patella to assess the extent of muscle wasting in his left thigh.

Right thigh measures 40cm.

Left thigh measures 35.5cm.

Palpation: A tight muscle band is palpated in the left erector spinae from T11 to L5, plus tightness in the left quadratus lumborum.

L1-S1 myotomes/muscle strength testing:

L1-L3 (hip flexion/psoas) – unable to resist on the left side due to pain

L4-S2 (knee flexion/hamstrings) – 2 (Oxford scale)



Range-of-movement (ROM)	Right	Left
Hip Passive Flexion (0-125°)	125°	80° with pain (a joint end feel cannot be felt)
Hip Passive Internal Rotation (0-40°)	30°	Minimal movement without pain
Hip Passive External Rotation (0-45°)	30°	Minimal movement without pain
Knee active extension (0-15°)	5°	0° (shaky due to quadriceps weakness)

Reflexes: Patellar and Achilles: Normal on both sides

Dermatomes: Lower limb sharp/dull test is normal apart from a small area on the left upper thigh (L1-L2 nerve distribution), which has reduced sharp sensation. Several deep, large abscess scars found around his left greater trochanter, possibly contributing to a slight sensory loss.

True leg length from ASIS to medial malleolus: Right 75cm, left 75cm

Apparent leg length from umbilicus to medial malleolus: Right 84cm, left 82cm

Postural imbalance may be causing apparent leg length discrepancy of 2cm, which is exaggerated by the contraction of his left knee and hip in a flexed position.

Extra note: On assessment of his crutches, 1 crutch is over an inch taller than the other and the handles are about 2 inches different in height. The patient is advised to trim down the taller crutch to make them the same height, and then the handle height can be adjusted if necessary.

Tongue: Swollen with a thick coat centrally

Pulse: Thin and tight

**ASSESSMENT**

**DX:** Osteoarthritis of the left hip (sequelae of osteoarticular tuberculosis)

The patient’s reduced range-of-movement and the flexed position of the hip at rest, pain on weight-bearing and the description of a ‘jagged edge’ in his initial x-ray all indicate probable arthritic changes in the left hip. Initially, there was suspicion of infectious arthritis. However, considering the eruption of the abscesses several months after the initial onset of pain, it is unlikely that infectious arthritis was the initial cause of his pain. It is quite feasible to suspect that the patient may have had osteoarticular tuberculosis of the left hip. Osteoarticular tuberculosis is very rare in western countries. It is, however, still common in developing countries like Nepal. The hip joint is the second most common joint affected by the disease. Treatment of osteoarticular tuberculosis typically includes anti-microbial drug therapy of at least 9 months duration. This appears consistent with the patient reporting having taken a lot of western drugs and having several hospital appointments over the course of 7 months. This would also coincide with the abscess scars (they are a common complication of the disease). Other than anti-microbial therapy, an arthroplasty of the affected joint is often the solution if there is severe joint deformity. This currently is not accessible to the patient due to location, cost and health facilities in the region.

**TCM DX:** Wind-cold-damp bi syndrome

**PROGNOSIS:** Due to the fact that the condition has been left untreated for several years, it will take extensive treatment and continued care to maintain patient mobility and comfort levels. A complete cure is not expected.

**INITIAL PLAN**

Acupuncture/electro-acupuncture treatment 5 days per week for 6 weeks

The focus is on local and distal points on the left hip and with electro-acupuncture to stimulate qi and blood flow, activate the muscles and reduce inflammation in the joint. As pain levels decrease, encouragement to place more weight through the left leg will be advised. Adjunct modalities when time permits include myofascial release/cupping to address muscle imbalances and increase circulation. Exercises will be prescribed to help build muscles in the left quadriceps, which will help support the hip joint. Chinese herbal medicine will be prescribed to improve patient energy levels and decrease pain and inflammation. Patient education regarding his expectations of improvement and self-care at home will be prescribed.

Typical treatment:

Supine/right lateral recumbent: ST36, SP10, GB34, LV3, LI4, SP6, SI3, BL62, 5 local Ah Shi points of the left hip and local needling around the scar tissue near the left greater trochanter

Electro-stimulation (2 pairs) - left gluteus medius, vastus medialis origin (SP10) and left tibialis anterior (ST36), peroneal muscle (GB34); 2/100 hertz

Alternate treatment:

Seated forward: Hwa Tou Jia Ji points, particularly on the left lumbar spine (deep paraspinals), to release the taught band of muscle

Additions to treatment (time permitting):

Cupping: Left lumbar spine and right thoracic; Left hip and ITB

Muscle release: Psoas/tensor fasciae latae (TFL)/adductors



Week 2

Week 4

Week 6

Exercises: Isometric contraction of the left quadriceps muscles to activate and assess muscle tone

Herbal formula: Du Huo Ji Shang Wan

### **OUTCOME**

After 6 weeks of treatment, the patient reported occasional dull pain in the left calf and thigh. Some nights, he was able to sleep pain-free. He experienced aching only in cold weather or after sitting for long periods of time. Sharp/dull dermatome testing became equal on left and right in L1-L2 nerve distribution. Range-of-movement testing showed a great improvement in passive, left hip flexion to 90 degrees without pain. The joint had a solid end feel at this range with application of overpressure. Knee flexion and extension strength became equal on both sides without pain (Oxford scale - 5). He attained 10° of internal rotation and 15° of external rotation in his left hip without pain. Apparent leg length remained the same and left thigh circumference, measuring muscle tone, increased by ½cm.

### **CONTINUED PLAN**

It is recommended the patient continue with treatment for as long as it is available to him.

Even though these modalities appear to decrease pain and inflammation, it is possible the patient would see further improvement with a modality that specializes in postural rebalancing, exercise and reeducation. Without further imaging, it is hard to give an accurate prognosis. It is likely, in a western culture, with more resources and affordability, this case would have been treated with a left hip arthroplasty and follow up rehabilitation care.

### **DISCUSSION**

Due to the severity and chronic nature of the patient's condition, a full resolution of his pain was not expected. The history of onset and initial diagnosis are still unclear. The environment in rural Nepal creates the challenge of walking up and down rocky paths, which makes walking for the patient more difficult. Doing this on crutches that were uneven in height likely contributed to the patient's postural imbalance, particularly the taught band of muscle in his left lumbar region. Because of the chronic nature of the patient's condition, it was imperative to discuss with him the need for continued care and management of his pain and mobility. The Chinese herbal formula, Du Huo Ji Sheng Wan, has been shown to inhibit inflammatory responses and pain in some biomedical studies on animals. It may also increase blood circulation and enhance the function of macrophages to clear inflammatory tissues. It is likely this contributed to the patient's progress by decreasing inflammation and increasing circulation in the joint.

## CASE STUDY: Chronic Gastritis with Inflammatory Bowel Syndrome: Crohn's Disease

Jason Gauruder LAc

### OVERVIEW

40-year-old male presents with chronic, burning gastrointestinal pain with accompanied acid reflux, belching, fullness, diarrhea, weight loss and occasional rectal bleeding. The patient also experiences fatigue and insomnia. Receiving only acupuncture and Chinese medicine therapy for this condition, the patient has shown an almost complete remission of symptoms after 8 treatments.

### SUBJECTIVE

Patient is a 40-year-old male presenting with gastrointestinal pain and diarrhea with initial onset 2-3 years prior to his initial consultation at this clinic. Patient reports pain is worse after eating and feels like a burning sensation in the epigastrium, with concurrent pain in the lower left and right quadrants of the abdomen. Spicy and oily foods exacerbate the problem and are generally avoided by the patient. Bowel movements are frequent with burning pain and diarrhea. The stools are yellow, loose and have a history of occult blood. Other gastric complaints include acid reflux that improves with belching, bloating and foul flatulence.

The patient experiences fatigue during the day and insomnia at night that manifests as difficulty falling asleep. Urination is frequent, yellow in color, but without discomfort.

The patient has not been able to seek medical attention for this condition before, nor taken any medications.

### OBJECTIVE

The patient's appearance is thin, with visible ribs and gaunt face. Speech is soft, but he's mentally alert. The sclera of his eyes are red, with a slight jaundice.

Upon palpation of the abdomen, exquisite rebound tenderness is felt halfway between the xiphisternal junction and the navel, as well as at bilateral points in the right and left lower quadrants, slightly lateral to mid-line between the navel and pubis (ST27 & KI14).

Tongue is red, with thick coat that is densest at the root and yellow in color.

Pulses are large, expanding and rapid with particular excess in the guan positions.

### ASSESSMENT

**DX:** Chronic gastritis with inflammatory bowel syndrome, potentially Crohn's disease

**TCM DX:** Damp-heat in the lower jiao; ST yin deficiency with fire

The level of transmural inflammation throughout the digestive tract gives high potential to chronic inflammatory bowel syndrome, which includes Crohn's disease and ulcerative colitis, characterized by chronic inflammation at various sites in the GI tract, resulting in diarrhea and abdominal pain. Tenderness upon palpation reveals inflammation focused around the ileum and colon, which is present in 45% of Crohn's patients. Lack of chronic bloody stools differentiates from ulcerative colitis. The relapsing and remitting of symptoms over the course of 2 years is also a likely marker of Crohn's disease.



### PROGNOSIS

Regular acupuncture and herbal medicine treatment to mediate the more serious symptoms of the disease, and allow for remission. The patient already avoids foods that exacerbate the condition. Follow-up treatment will be required to manage symptoms, considering the reoccurring nature of inflammatory bowel conditions.

If there is little to no response to therapy within 8 treatments, a colonoscopy or ultrasound would be indicated to rule out further obstruction or ulceration of the Large Intestine. A stool sample would also be ordered to check for inflammatory markers and/or if parasitic infection is responsible for the inflammation.

### PLAN

Treat with acupuncture 2 times per week with daily Chinese herbal medicine intake. Upon the eighth treatment, the patient will be reevaluated.

**Treatment principle:** Drain damp-heat, clear Stomach and Large Intestine fire, nourish yin and unblock stagnant flow of qi & blood in Yangming channels.

**Typical treatment:** LI11, LI4, LI2, CV12, CV10, ST25, SP15, ST36, ST44, LV2, KI10

**Alternative points:** PC6, KI14, ST40, LV8, DU20, Ling Gu

**Herbal Formulas:** Formulas are based on presentation of pulse at each treatment, and are adjusted according to symptoms and herbal availability.

**Huang Lian Su:** 8 pills TID for first week to clear inflammatory heat of Stomach



Shu Gan Wan: In conjunction with Ma Zi Ren Wan, 2 pills TID to clear Stomach heat and course the Liver to prevent overacting on Stomach and insulting Large Intestine qi flow

Ma Zi Ren Wan: 2 pills TID to drain damp-heat from Large Intestine and moisten dryness from yin deficiency

Zhi Bai Di Huang Wan: At treatment 7, in conjunction with Tao Ren Cheng Qi Tang, 2 pills BID to clear deficiency heat and tonify yin

Tao Ren Cheng Qi Tang: 2 pills BID to unblock bowels, stop bleeding, clear damp-heat

## OUTCOME

After 8 treatments, the patient reported a complete resolution in burning pain and majority of problematic GI signs and symptoms. After 2 treatments, the burning pain in the epigastrium had decreased and sleep improved. At this time, due to an increasingly wiry pulse, the formula was changed from Huang Lian Su to Shu Gan Wan to address Liver overacting while concurrently clearing Stomach heat. After 4 treatments, the pain and symptoms in the epigastric area had almost resolved, while the burning pain in the lower abdomen remained with burning diarrhea and painful bowel movements. The chief complaint being diarrhea, the formula Ma Zi Ren Wan was added in concurrence with Shu Gan Wan. After 6 treatments, blood was noted after bowel movements, with moderate pain during movement. Slight anal prolapse was noted giving suspicion of hemorrhoids. The patient reported a descending nature of the pain from the whole abdomen to below the navel. The decrease in overall GI complaints and an unrooted pulse allowed for the formula Zhi Bai Di Huang Wan to be used in place of Shu Gan Wan to tonify yin while clearing empty heat. Tao Ren Cheng Qi Wan replaced Ma Zi Ren Wan to address the signs of bleeding. After 8 treatments, the bleeding had ceased, lower abdominal pain had been resolved, stools no longer had undigested food and were, overall, soft and formed. Palpation of the abdomen was negative for tenderness. The chief complaint became pain from hemorrhoids.

## FUTURE PLAN

The nature of inflammatory bowel disease to flare-up requires the patient to comply with follow-up treatment when a relapse period occurs. Since the condition is primarily inflammatory, it is still classified as pattern 1 according to the Montreal classification of Crohn's disease. If constant relapse patterns occur, it is possible the disease will advance to pattern 2 or 3, requiring more substantial treatment. Pattern 2 involves primarily stenotic or obstruction, and pattern 3 is primarily penetrating or fistulizing, both requiring different therapeutic approaches and possible surgical intervention.

## CONCLUSION

The patient responded well to the treatment plan. Considering the limited resources available to the patient, using acupuncture and herbs alone were effective in remitting a pattern of chronic inflammation that has been ongoing for 2 years without any form of intervention. With continued support and treatment, if relapse occurs, it is likely the patient will be able to live a comfortable life with a lower chance of complications from chronic Crohn's flare-ups. Acupuncture and herbal medicine alone have proven greatly effective for signs and symptoms of GI inflammation, and should be considered as a



first line treatment for pattern 1 classifications of Crohn's disease. In conjunction with allopathic care, it could be hypothesized that Chinese medicine would also be effective complementary care for pattern 2 and 3. Due to the limitations of the accessible health care services available to the patient in Nepal, it is difficult to obtain objective GI imaging that is generally necessary for diagnosis of the progression and severity of Crohn's disease. If such measures were more readily available, it would better define the improvement of interior structures in the absence of allopathic treatments.

## CASE STUDY: Spinal Trauma Sequela with Osteoarthritis of Right Knee

Jubal Bewick LAc

### OVERVIEW

60-year-old female presents with spinal trauma sequela consisting of constant mid- to high grade pain and restricted flexion of the spine. In conjunction with the treatment for the spinal pain, the patient is treated for pain of the right knee with mid-grade pain and global swelling of the area causing functional impairments. With the completion of the prescribed treatment plan, greater than 75% improvement in symptoms of the spine, and greater than 90% improvement in symptoms with respect to the right knee are achieved.

### SUBJECTIVE

The patient presents upon first consult with a complaint of thoracic and lumbar spinal pain greater than 1 year with respect to onset of symptoms. The patient admits to having fallen from a ladder and landing on her spine over a year prior. The duration of the spinal pain is constant with no respite, even while resting. The quality of pain is a mixed pattern of sharp and dull pain as described by the patient. The main aggravators of the pain are forward bending, sitting and household chores. The patient finds but minor respite with warmer weather.

The patient's concurrent complaint is right knee pain. The onset of the complaint is greater than 1 year. The area of pain is described as the entire knee. The duration of the patient's pain is intermittent with a dull, achy characteristic with occasional episodes of sharp pain. The occasional episodes of sharp pain have no distinct pattern the patient can recall. The patient's main aggravators for the right knee pain are standing, sitting, cold weather, flexion greater than 45 degrees and household chores.

#### Social history:

No reported history of smoking or drinking

#### Medical history:

Stage 2 hypertension [unmanaged]

Reports previous diagnosis of degenerative joint disease in knee

#### Medications & Supplements:

No reported medications

#### Review of systems:

Cardiac: No palpitations or chest pain

Respiratory: No shortness of breath

Digestion: No reported gas, bloating, nausea or abdominal pain

Sleep habits: Easy to fall asleep, but wakes frequently at night

Bowel movements: Patient reports within normal limits

Urination: Patient reports within normal limits

Integumentary: No spontaneous sweats or night sweats

Heat signs: Hot flashes

### OBJECTIVE

Vitals: BP: 175/99 mmHg, PR: 59 bpm

Pulse: Thready with transient changes of slippery and tight



Tongue: Large, red/purple coloration, dry and flattened tip; Peeled coating in the upper jiao of the tongue, yellow, light coat in middle jiao and thick white coat in the lower jiao. Engorged sublingual veins with distention greater than 75%

Palpation: L3 vertebra is enlarged on palpation as compared to other L vertebrae; T7, T12 are tender to the touch.

Visual inspection: L3 is visibly enlarged and protruding posteriorly as compared to other lumbar vertebrae.

AROM of spine: <30 degrees flexion, 25% lateral flexion with grimace, 25% extension with grimace

AROM of knee: <60 degrees flexion

PROM of knee: <60 degrees flexion; Crepitus felt and clicking heard with movement

Anterior drawer: Negative, Posterior drawer: Negative, Varus/Valgus: Negative, McMurray's: Negative

Reports: MRI of the lumbosacral region taken 09/18/2014

Impression: Compression fracture of T7 and T12 vertebral bodies with marked anterior wedging. Compression fracture of L3 vertebral body. Probably osteoporotic fracture

Degenerative changes in lumbar spine with mild L5-S1 neural foraminal stenosis

### ASSESSMENT

Before ascertaining medical records from the patient, differential diagnosis was the following:

Diagnosis (spine): Degenerative joint disease/osteoarthritis, herniated

disc, spinal lesion, Osteoporotic fractures of T7, T12 and L3 (knee): Degenerative joint disease/osteoarthritis

TCM Diagnosis (spine): Bony bi due to underlying KD yin deficiency, bi syndrome due to wind-cold-damp invasion, qi stagnation and blood stasis causing pain (knee): Bony bi due to underlying KD yin deficiency with wind-cold-damp invasion

### INITIAL PLAN

Treat with acupuncture and Chinese herbal medicine with the 10th treatment designated as the reevaluation point for determination of progress. The length of time for the 10 treatment protocol is over a period of 6 weeks. The beginning treatment is focused on local stimulation of qi, blood and neural system around the right knee, while distally treating the spinal pain. This treatment approach is based upon the assumption of degenerative joint disease/osteoarthritis of the spine and osteoarthritis of the knee. Both of these western diagnoses are concurrent with findings of bi zheng – bony bi syndrome with underlying Kidney yin deficiency as the root. The herbal formula used in conjunction with the acupuncture is Du Huo Ji Sheng Tang with a dosage of 8 pills TID.

Typical acupuncture point selection for initial plan is: He Ding, Xi Yan, ST34, ST36, SP10, SP9, KD3, SI3, UB62, Zhu style scalp acupuncture for spinal pain, Yao Teng Xue.

The patient's hypertension is an ongoing discussion, as the patient has been dealing with misinformation from local health authorities in the form of only suggesting dietary changes, or improper explanation of the importance of controlling hypertension. A secondary issue is the local rumors about drug therapy, especially hypertension medications. The rumors surround the side effects, some true, some not, which lead to out-weighting the need to control hypertension in the patient's perspective.

### TREATMENT PROGRESSION

The patient was steadily receiving benefit from acupuncture for the right knee pain, but having limited results with the spinal pain after the 3rd acupuncture visit, which was the visit on which the patient brought the previously taken MRI report and film. Upon review of the report of findings affiliated with the MRI, a change of acupuncture treatment was taken for the 4th visit.

Acupuncture procedure: Hua Tuo Jia Ji at levels of T7, T12, L3; The needles were placed at the depth of the periosteum of each vertebral body and then electro was applied at a continuous frequency of 80Hz. Additional points would be prescribed depending on changes in pain level of the right knee: UB40, Ah Shi 2 cun above UB40, Ah Shi 1.5 cun lateral UB40, UB39.

A change in Chinese herbal medicine was made as more yin deficient symptoms were being seen. Along with Du Huo Ji Sheng Tang 8TID, Zuo Gui Yin was added with a dosage of 3 pills BID.

Continued discussion was had regarding hypertension, but no progress had been made by this point in time.

### OUTCOME

Final outcome for the patient after the 10th visit are as follows:

### SUBJECTIVE

Greater than 75 % decrease in spinal pain with or without activity

Greater than 90% decrease in knee pain with or without activity

No night sweats

Waking no more than 1 time per night

### OBJECTIVE

AROM of spine: WNL in all directions with no grimace present

AROM of knee: WNL in flexion with no grimace present

PROM of knee: WNL in flexion with no grimace and less crepitus felt, but clicking still present

Health management goal: Agreement was made with the patient to be assessed in Kathmandu and receive counsel with drug therapy to care for her stage 2 hypertension. In this agreement, the patient acknowledged the need for continuous monitoring to make sure hypertension is properly managed, even after medication is prescribed.

### CONCLUSION

Maintenance care will be needed due to the patient's age, history of trauma, bone degeneration and lifestyle that leads to excess exposure to inclement weather. The overall prognosis with maintenance care is good considering the results seen in regular care with respect to quality of life and pain management.

Injury prevention discussions and testing are deemed continually necessary considering the patient has been diagnosed as osteoporotic by physicians in Kathmandu. These discussions and tests could be a major step towards prevention of accidents and further degeneration that could lead to bone damage. Proper evaluation for high risk osteoporotic regions of the body needs fracture risk assessment (FRAX), which includes DEXA scans, and if deemed necessary, use of proper drug therapy. Monitoring of ongoing bone loss, or response to treatment with regard to osteoporosis, should be repeated approximately every 2 years per standard of care for patients with known osteoporosis.

A major goal to achieve, outside of maintaining a relatively pain-free state of health for the patient, is continued monitoring of the patient's hypertension. This concern was agreed upon by the patient at the last visit. The patient agreed to see a physician in Kathmandu hospital system and receive drug therapy counseling with intervention for her hypertension. This health concern, in my point-of-view, outweighed the concerns held by the patient in regard to pain management. Poor understanding of hypertension is linked to inadequate public education and understanding of the causes of hypertension, and pathologies created by persistent hypertension and/or the proper treatment/monitoring of the condition.

## CASE STUDY: Febrile-Induced Cerebellar Ataxia

Erin Smith LAc

### OVERVIEW

58-year-old male patient presents with ataxia, severe dizziness, vertigo and slurred speech. Symptoms started after a severe febrile illness in November 2012, and appear to be getting worse since that time. After 8 acupuncture treatments, patient reports a minimal decrease in overall dizziness and vertigo, and his walking appears slightly smoother immediately after receiving acupuncture.

### SUBJECTIVE

In November 2012, patient had a febrile illness for 6 or 7 days with severe vomiting, diarrhea and dark colored stools. Immediately following this illness, patient reports difficulty speaking and walking. He was admitted to the hospital for several days and received a CT scan, a routine blood panel, urine and stool testing, and was put on medication, which he discontinued on his own.

Patient presents with difficulty walking independently and slurred speech, which he reports has gotten worse since the febrile illness in 2012. Whenever he stands up and starts to walk, he has severe dizziness and vertigo and feels like he and his environment are spinning. No change in dizziness when he stands and looks upward. He is unable to stand up or walk without support. He reports occasional mild back pain, more chronic than the current illness and not coinciding with the difficulty walking. He has no pain in his legs.

He reports being diagnosed with high blood pressure, but stopped taking the medication as it "was not helping" him. He has headaches at least a few nights per week. The location and severity of the headaches is hard for him to determine. He is unaware of a history of ear pain or chronic ear infections. There is no hearing loss or ringing in the ears present. He has had blurry vision in the right eye for the past 20 years, after a foreign body hit him in the eye while he was riding the bus. Glasses have been recommended, but he prefers not to wear them.

### OBJECTIVE

Patient presents with ataxia with inability to walk or stand from a seated position without support. He has mild muscle spasticity on both legs while walking with support. Patient is able to stand on his own briefly, reports feeling very dizzy and unstable, and visibly has a hard time maintaining equilibrium. Balance is equally unstable when standing on just his right or left leg with support. The patient is able to walk on his toes and heels, while supported, with no pain.

The deep tendon reflexes of both patellas, Achilles' tendons and hamstrings are all responsive and normal. Seated muscle testing of knee flexion, extension, ankle dorsiflexion and plantar flexion, and hip abduction and adduction bilaterally all have normal strength and range-of-motion. All cranial nerve tests are normal. Patient is able to move both arms smoothly overhead and no intention tremor is apparent. Tympanic membranes are both intact, though may have minimal scarring. No pain present around the ears with palpation. Nystagmus is not present.

Blood pressure is measured at 165/105. He is missing several front teeth, which he reports fell out on their own several years ago.



Directly after the febrile episode, on 11/19/12, he had a MDCT scan of his head. The report concluded there were no abnormalities present at that time. All routine blood and urine testing was normal. EKG and ultrasound of the pelvis and abdomen were also normal.

The pulse on the left hand is thin overall, and deep and weak in the chi position. The pulse on the right hand is slippery and forceful in the cun and guan positions, and deep and weak in the chi position.

The tongue has a dry, pink body with a thick, yellow coat at the root.

### ASSESSMENT

DX: Cerebellar ataxia due to febrile illness

The patient does not have recent medical records or thorough diagnostic imaging. Several neurological conditions are also possible diagnoses in this case. Multiple sclerosis, Ménière's disease and other causes of damage to the cerebellum must also be considered for this patient.

Multiple sclerosis (MS) can often present with ataxia and slurred speech, although these are not typically the primary symptoms associated with this disease. The most common symptoms of cerebellar dysfunction that are seen in MS can include dysarthria, instability of the head and trunk, intention tremor and incoordination

of voluntary movements and gait. Along with ataxia, nystagmus can also appear early in the disease. MS is an autoimmune disease, typically starting between the ages of 20 and 40, more common in women than men. Most forms of MS usually start gradually, with an attack of symptoms, followed by a period of remission. Primary progressive MS does not have any periods of remission. It gets progressively worse, and typically presents with other primary symptoms that are not seen in this case, such as extreme fatigue, pain, numbness and tingling. Primary progressive MS can be ruled out definitively with an MRI of the brain and spinal cord with absence of scarring of the myelin, and a lumbar puncture of fluid surrounding brain and spinal cord, showing an absence of antibodies.

Ménière's disease is a disease of the inner ear. This diagnosis is initially considered before his symptom of slurring of the speech is known. The primary symptom of Ménière's disease is recurrent episodes of vertigo, which can last 20 minutes to 24 hours at a time. When severe, it can lead to falling and difficulty walking. Ménière's disease typically presents with hearing loss, ringing in the ears, and a feeling of fullness or pressure in the ear, with which this patient does not present. His balance is not improving and vertigo is constant when he is standing and attempting to walk, neither of which are present in Ménière's disease.

Cerebellar ataxia, due to stroke, is also possible, but not likely for this patient. Cerebellar stroke accounts for only 1% of all strokes and has 1 of the highest mortality rates. This type of stroke typically comes on suddenly with symptoms of headache, nausea, repeated vomiting, dizziness, vertigo and inability to walk or stand, but does not typically include fever or diarrhea. Coma occurs in about 50% of these cases and edema formation is also common, often leading to sudden respiratory arrest. Other causes of cerebellar damage are more genetic in nature and occur earlier in life, or are a result of nutritional deficiencies primarily related to alcoholism, which are not factors for this patient.

The diagnosis for this patient is likely to be cerebellar ataxia due to physical trauma, which in this case was a prolonged fever. Based on the history of his present illness, his symptoms started directly after having a prolonged fever for 6 to 7 days. The cerebellum is particularly sensitive to thermal injury, and prolonged fever can cause irreversible damage to the tissue and permanent cerebellar dysfunction. The damage is expected to be along the midline of the cerebellum, as the movement of the trunk and legs are affected in this patient. The damage would more likely be along the lateral hemispheres if the arms were affected. The damage is also suspected to be bilateral, as speech disturbance occurs only when damage is along both sides of the cerebellum. The most primitive areas of the cerebellum are connected with the vestibular nuclei and apparatus. Damage to this part of the cerebellum results in disequilibrium that is obvious with rapid changes of body position, and the presence of dizziness and vertigo, both of which this patient displays. These signs and symptoms can make the damage look like it is in the vestibular system itself, although coming from damage to the cerebellum.

TCM DX: External wind in the channels with underlying Kidney qi deficiency

The initial febrile illness resulted in an external invasion in the channels from which the patient has not recovered. He had no obvious preexisting signs of wind due to organ pathology before the febrile

illness, making the source of wind most likely external in nature. Kidney qi deficiency is evident in this case due to age of the patient, history of hard physical labor before his present illness, intermittent lower back pain, missing teeth and the weakness of bilateral chi pulse positions.

## PROGNOSIS

Prognosis is poor due to the likely source of injury from November 2012. The main goal of treatment is to support the overall health and well-being of the patient, and potentially slow the progression of the neurological disease. Although unlikely, based on other clinical results involving brain trauma, it is also possible that with intense treatment, the patient may regain the ability to walk independently, and improve the quality of his speech. Acupuncture, electro-acupuncture and Chinese herbal medicine will all be used to work towards these goals.

## INITIAL TREATMENT PLAN

Acupuncture treatments are recommended 2 to 3 times per week for 16 sessions before reevaluation. Acupuncture would have been recommended more often, due to the severity of the patient's condition, however he lives over 2 hours from the clinic and has to rely on family support to bring him by bus.

The focus of treatment is to expel wind from the body to reduce spasticity and erratic movement of the legs while walking, and to support the Kidney organ system. Typical acupuncture treatments involve combinations of the following points: GB12, 20, 34, 39, 41, SI3, BL62, TW5, LU7, LI4, LR3, 8, SP6, KD3, 6 and Ba Feng.

Scalp acupuncture with electro-stimulation is used along the motor line, including the speech, dizziness and vertigo area, and 3 lines for voluntary movement. Scalp needles are manipulated for 10-15 minutes while patient walks with assistance or moves legs while seated. Electro-stimulation is used passively for approximately 25 minutes.

The Chinese herbal formula, Qu Ji Di Huang Wan, is selected to help nourish the Kidneys with added support for the eyes.

The Epley maneuver is performed at the first several treatments before Ménière's disease is ruled out as a diagnosis.

Patient is referred for glasses to reduce the effect the blurry vision in his right eye is having on his dizziness and walking. It is recommended that he continues to have his blood pressure monitored and resume medication if needed to reduce the long-term risk of stroke. Updated and more thorough imaging, and a routine blood panel are recommended to help confirm the diagnosis. However, this information is not likely to change the direction of treatment or prognosis based on the history of the illness and objective information, and will likely put a greater financial strain on the family.

The patient is informed of the prognosis of his illness, including the unlikelihood of regaining the ability to walk independently or improve his speech. He agreed that using acupuncture and Chinese medicine to try to regain some level of normal function, reduce the severity of his symptoms, and support his body as a whole, is worth the investment of his time.

## OUTCOME

After receiving the Epley maneuver, patient reported an initial decrease in dizziness and vertigo, but stopped improving after a few repetitions. The maneuver became unnecessary as the patient no longer felt dizzy with the various changes in head position.

Patient showed little response to the 8 acupuncture treatments. Before-and-after videos showed the patient's gait to be slightly smoother with less muscle spasticity after treatment. The patient reported feeling less dizziness and vertigo immediately following treatment and at night. His symptoms while walking, however, remained unchanged. No change in quality of his speech had been detected. After the first several weeks of treatment, the patient became less compliant with the frequency of his treatments, as the travel distance and subsequent hardship made treatment frequency too difficult for the patient and his family.

## REVISED PLAN AND PROGNOSIS

Since the patient showed minimal improvement, it was recommended that he continue treatments later this year when a team will be present for 6 continuous months. If he is able to have 2 to 4 treatments per week for 12-15 weeks straight, it will be more evident if his symptoms will continue to show improvement, or if the minimal improvement already seen is the maximum benefit expected. His prognosis remains poor due to the nature of brain damage, the progression of his symptoms over time, and his advancing age. Considering how severely this affects his life, it is worth an intensive series of treatments on a frequent basis to see if his brain can be retrained to coordinate walking. The patient and his family are unsure of their ability to be compliant with the frequency of treatment based on the hardship they are experiencing, and the amount of effort it takes for him to come to a session.

## CONCLUSION

The patient was only able to make it to the clinic for 8 treatments out of the recommended 16. Patient compliance with acupuncture treatment is even more important for patients who have severe pathology, such as brain trauma. It is not uncommon for results to be very slow for patients with severe conditions, and although minimal, he was making some progress in the quality and intention of his gait, and reduction in dizziness and vertigo. Based on several factors surrounding this case, it is unlikely that his walking will ever be what it once was, but it is in the realm of possibility to help him regain some of the coordination he would need to be able to walk on his own with the support of a walking stick. For him to regain even that level of independence would greatly improve the quality of his life, since he places a great burden on his family because of his lack of function. This is obviously difficult for him to accept. With acupuncture and Chinese medicine, it is possible that giving his body some much-needed support, and clearing some of the remaining external pathogens, his symptoms may start to improve. He has made little progress in just 8 visits, but there is still a chance for him to improve with an intensive series of treatments.



<https://youtu.be/JbxZW87U-ws>

## CASE STUDY: Palliative Management of End-Stage Emphysema

Rebecca Groebner MAc LAc

### OVERVIEW

71-year-old male presents with cough and severe shortness-of-breath, caused by emphysema. Initially, patient was stabilized during an emergency home visit. At patient's request, palliative home care was provided. This type of care is necessary for anyone suffering from chronic illness, yet as doctors, we often don't follow cases through to this point. How do we manage end-of-life care in rural Nepal?

### SUBJECTIVE

Patient presents with a chronic cough of 3 years duration and shortness-of-breath. Acute symptoms began 10 months ago when he presented with severe pain in the solar plexus area and inability to breathe. He was diagnosed with allergies at the local health post, but allergy medications were not helpful. He was transported to a hospital and diagnosed with emphysema and a pneumothorax. 1 month ago, patient was hospitalized for a second time and sent home with an oxygen tank, which he requires for respiratory stability.

He is only able to breathe if he sits up straight or leans forward. Cold weather and fatigue make these symptoms worse. Warmth, warm water, sunshine, his nebulizer and black coffee make it easier for him to breathe. His cough is productive with white mucus that is sometimes tinged with blood.

In addition to this, the patient suffers from worsening anxiety, insomnia, sharp left-sided chest pain, weight loss, daily nosebleeds, constipation, loss of appetite and 1-sided edema in his right limbs causing leg pain when walking. His leg pain and sleeping are better when sitting in a cross-legged, seated position with pillows stacked behind him. All of these symptoms are made better by listening to the radio and visiting with friends and family, taking his mind off his pain.

### OBJECTIVE

Patient presents with a thin body. Clothes that once fit him are now baggy. His ribs, scapula and clavicle bones are easily visible. He becomes breathless with small movements. His facial color is blanched. Patient breathes out through pursed lips.

Patient has a score of 40 on the Palliative Performance Scale (PPS). Ambulation is low. He requires assistance from a caregiver for moving and elimination. He is unable to do any work. He can drink from a cup, but requires assistance to eat. Food intake is reduced, but water intake seems normal. He is often fully conscious or drowsy. He is rarely confused, unless his blood oxygen levels drop below 70%.

Patient has +1 pitting edema in the right hand and +4 pitting edema in the right foot. The leg feels room temperature on palpation. Dorsiflexion of the right foot causes pain and increases shortness of breath. Blood oxygen levels rise and fall, becoming more extreme over the course of our visits, with the lowest reading being at 63%. The pulse and respiration rates rise as the blood oxygen levels fall.

Lung exam shows increased expiration time with decreased lung sounds in the lower lobes. Lungs are clear to auscultation in the lower lobes. Soft to medium crackles and high-pitched wheezing on both inhalation and exhalation are present. An occasional pleural friction rub can be heard in the right middle lobe. Cardiac auscultation shows an irregular heart beat with an extended diastolic conclusion



(S2). Both lung and heart sounds decrease over time.

The right radial pulse is weak and deep. The left is thin and deep. His tongue body is dusky with multiple cracks. The tongue coat is thick, dry, yellow and stringy. There is a +3 sublingual stasis.

### ASSESSMENT

**DX:** Hospital records show that the patient was diagnosed with emphysema 10 months ago. X-rays show honeycomb cysts, and radiological conclusions communicate that a cyst in the "left middle lobe" burst, causing a pneumothorax.

This patient is a non-smoker and hasn't had the occupational hazards that are usually associated with emphysema. It is likely that the lifelong use of a traditional Nepalese indoor cooking stove, with combustible biomass fuels, contributed to his disease state. In addition, x-rays show lower lobe thickening and concentration of bullae, which is a typical indicator of a genetic, alpha-1 antitrypsin deficiency. This deficiency reduces the likelihood of cellular repair to lung tissue predisposing to emphysema, even with reduced exposure to inhalants.

TCM DX: Lung qi deficiency with obstruction by damp-phlegm and Kidney yang deficiency

PROGNOSIS: Patient's condition worsens daily. It is evident that he is moving through the stages of grief, and acceptance of his death. Due to a PPS scale of 40, it is likely that he will die sometime in the next couple of months. An accurate BMI and FEV1 reading could help with a more accurate prediction of his lifespan, but the tools to measure this are not available to us at this time.

### INITIAL PLAN

Patient is recommended to go to the hospital, but he refused.

Plan for this patient focuses on improvement in his quality of life, palliation of symptoms associated with end-stage COPD, and support for patient and his caregivers around any other physical, mental-emotional or spiritual issues that may surface concerning his death process.

Typical treatment:

Monitoring of physical vital signs

Codeine, at a dose of 30g per evening, to provide minimal pain relief and reduction of cough so that the patient can sleep (This is purchased from the local pharmacy, where it is available to anyone.)

Cranial sacral therapy (CST) to release the occiput and tentorium cerebelli, to reduce anxiety and calm wheezing

Mild massage of the neck, shoulders and area between the shoulder blades

Education for patient and his family, including information about his disease, the cleanliness of his living area, danger of too much bed rest, etc.; Providing accountability for family members around his care

Emotional support around and witnessing the grief and death process; Discussion of the patient's goals and desires for his final days

Drawing supplies and encouragement to engage in activities he finds enjoyable, including a small walk to the porch in the sunlight

### OUTCOME

During first contact, the respiratory emergency was stabilized and patient's oxygen levels returned to normal ranges for his disease state. After that time, the patient showed relatively stable oxygen levels, less anxiety and was able to sleep through the night. He began sharing his life story, but was not yet able to discuss his death.

After 3 weeks, the patient presented with +4 pitting edema in his legs that prevented him from putting weight on his feet. He reported sharp chest pains. He became vocal about his death and stopped smiling and laughing as much.

At 4 weeks, the patient reported lowered anxiety and a feeling of increased relaxation. He asked for more practitioner visits, reporting feeling best on days when we came.

After nearly 30 patient contacts, the patient's family reported a respiratory emergency with sharp chest pains. Upon arrival, pulse oximeter readings showed a blood oxygen level of 63% with a pulse of 34 bpm and respiration rate of 28. The patient could not maintain consciousness and at some point, could not recognize family



members. Cultural traditions around death were already being performed by the family. He died during the night.

### DISCUSSION

In developed nations, the progression of COPD is delayed and the quality of life increased by using long-term oxygen therapy (small, portable tanks), and morphine to reduce the feelings of shortness of breath. Patients are recommended to follow a regular exercise and pulmonary rehabilitation program to maintain aerobic capacity and hence, maximum oxygen uptake.

A portable oxygen tank was not an option for this patient. His oxygen tank required 3 strong men to lift it into his room. The tubing to the tank allowed him 8 feet of movement from his bed. The costs of the tank were so high that the family often turned the tank off even though the patient would respond with blood oxygen levels in the low 70%. By the time of response to his respiratory emergency, he had been non-ambulatory, due to the tank, for over 15 days. With complete bed rest, elderly patients can lose up to 5-6% of their muscle mass each day and aerobic capacity decreases markedly<sup>1</sup>. Though it was recommended that the patient move each day, he reported that he was too weak to get out of bed.

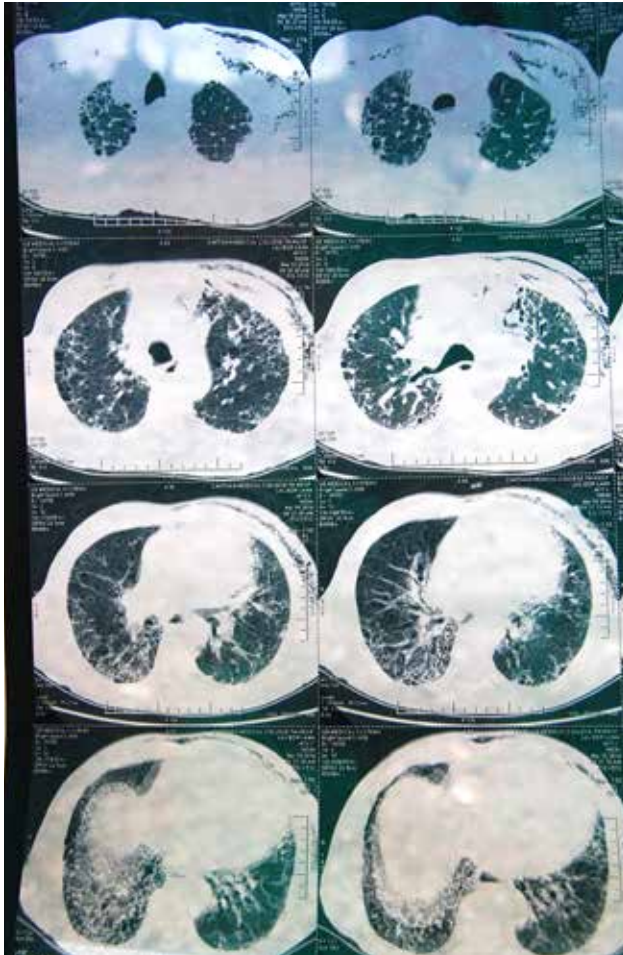
This patient faced substantial impediments to obtaining morphine for pain control and relief of his shortness of breath. Had pain control been available for this patient, his quality of life would have been increased, and based on emerging studies, his lifespan may have been increased as well<sup>2</sup>.

### CONCLUSION

This patient and his family tried to get help from the local health post, a hospital in Kathmandu and a teaching hospital in Chitwan. They experienced an unfortunate misdiagnosis and multiple, failed attempts at a blood draw that left the patient's arm completely bruised. During their final hospital visit, they were told not to come back, and were given medications for asthma and allergies. No healthcare provider explained the diagnosis to the patient, nor walked the patient and his family through the reality of his upcoming death. The doctor who prescribed the oxygen tank never spoke with the patient or his family about the risks associated with geriatric bed rest.

Though ARP is not an organization that commonly provides home care, and specifically, palliative home care, our team opted to





continue providing such care in this patient's case. The patient had no other options and our volunteers and interpreters were willing to spend the extra time, after a full day of clinical work, to perform vitals checks, and help educate the patient. Our organization is not often asked to provide end-of-life care and as such, we have not developed protocols for the management of these cases. This situation presented us with an opportunity to determine the resources that ARP can commit to such cases.

Our management of end-of-life care is dependent on the circumstances taking place outside of regular clinical hours. Are our volunteers and interpreters drained of energy from seeing a surplus of patients most days? In this case, we had numerous bus strikes that lowered our daily case loads, and I felt that I had enough energy to spend with the patient. The patient went through many stages of grief and as such, the nightly visits were emotionally charged requiring me to commit to a great deal of self-care, including morning and evening meditation, Taiji practice, writing and a lot of support from my team members. It was often hard to find an interpreter to volunteer to sit with a dying man when they faced the alternate choice of watching a movie or simply going to bed after dinner. This presented the possibility of resentment from the interpreters, which was something that I didn't want to risk. I tried to rotate through the interpreters and to go either right before dinner, or shortly thereafter. This kept the task associated to a time that already held a social commitment, and it seemed to be less jarring for everyone.

As healthcare providers, it is hard to accept that no matter what knowledge we bring to the bed of a dying person, we will not find a way to "save" the patient and somehow magically restore their body. I encountered this difficulty in the first couple of weeks with Lal Lama. I worked all day to problem solve health issues that could be cured or managed. At night, I had to shift my intention so that I could listen to a patient's story about his life and receive information about what his best death looked like, so that I could advocate for that if necessary. I had to tell the patient that there was nothing I could do to cure him, and that we were limited in the management of his pain. I felt myself unworthy of sitting with Lal and told myself that there must be a doctor nearby who could do this job better than I could. I finally came to realize that I was the best that Lal had, and in the end, I am so grateful that I embraced that and became the listener and friend that he needed. He taught me how to sit with the dying and how to die when the time comes for me.



<sup>1</sup> Merck Manual

<sup>2</sup> Lamas, Daniela and Rosenbaum, Lisa. Painful Inequities - Palliative Care in Developing Countries. *New England Journal of Medicine*. 366: 199-201. January 19, 2012.

## CASE STUDY: De Quervain's Syndrome

Maggie Shao MTCM LAc

### OVERVIEW

57-year-old female presents with hand tingling and severe wrist pain that began 9 months prior to visiting the clinic. Both wrists are affected. Patient reports pain began first in right wrist, but currently feels more pain in her left wrist. The western diagnosis for this patient is De Quervain's syndrome, caused by repetitive stress injury. After 7 treatments with NSAIDs, acupuncture, moxibustion, topical pain ointment and electro-stimulation, patient reports 75% reduction in pain.

### SUBJECTIVE

Patient is a 57-year-old female presenting with bilateral wrist pain. Pain began with the right wrist, and now her left wrist is more painful. Patient points to bony prominences on both wrists, near radial styloid, and reports chronic pain for the last 9 months. Patient reports that pain is worse with cold and damp weather. She comes to the clinic with no prior intervention or treatment for this wrist pain.

### OBJECTIVE

Patient appears in good health with weight proportional to height, and luster in facial complexion, hair and skin. Blood pressure is 120/80 and blood glucose is 101 mg/dL. Tongue is pale with white coat. Pulses are thin and weak. When palpating both right and left wrists at the location of the radial styloid, near acupuncture point Lung 7, patient reports sharp pain. She tests positive when performing Phalen's test, reporting numbness and pain after holding hands in prayer position for several seconds. Noticeable prominence on both wrists at the radial styloid is evident. Patient tests positive with Finkelstein test, reporting severe pain with thumb flexed across the palm, enclosing fingers around thumb in a fist and deviating and rotating the fist toward the ulna. DTRs (deep tendon reflex) for brachioradialis, biceps and triceps are normal.

### ASSESSMENT

**DX:** De Quervain's tenosynovitis

De Quervain's syndrome is stenosing tenosynovitis of the short extensor (extensor pollicis brevis) and the long abductor tendon (abductor pollicis longus) of the thumb with the first extensor compartment. Inflammation of the tendons, and subsequent fibrosis over the radial styloid of the first digit dorsal compartment causes this area to become thickened and bone-hard, raising the skin and creating a prominence that is tender and painful. De Quervain's tenosynovitis is most commonly due to the repetitive stress injury involving repetitive hyperextension of thumb. Diagnosis is based on the major symptom of aching pain at the wrist and thumb, aggravated by motion. Physical testing is the Finkelstein test as described above.

Considerations for differentiating include:

- Dorsal ganglion of wrist – Cysts are fluid filled with clear high viscosity fluid. This patient's swellings are bony and hard, more consistent with De Quervain's tenosynovitis.
- Carpal tunnel syndrome (median nerve compression within wrist) – This is diagnosed with a positive Phalen's test of elicited numbness and tingling along median nerve pathway, which



includes the second finger. Further testing with patient shows no numbness in second or third finger, ruling out CTS.

- RA (rheumatoid arthritis) – A blood test for RA factor is useful for this diagnosis. Usually, there is symmetric involvement of multiple joints that are inflamed, with redness and warmth. RA symptoms often include symptoms of malaise and fatigue. Patient does not show any characteristic redness or warmth in swelling, or signs of fatigue.
- Cervical radiculopathy of C5 or C6 nerve root – Sensory abnormalities in a distribution involving the dermatome; Patient tests normal for deep tendon reflexes, ruling out cervical radiculopathy.
- Scaphoid fracture in wrist – Can test using tuning fork on scaphoid bone; If fractured, patient will report pain. Patient does not report any accident occurring with onset of pain. Pain first occurred in right wrist and then left wrist. This is more consistent with repetitive stress injury from hyperextension of thumb.

**TCM DX:** Cold-damp bi syndrome with local channel blockage of Lung and Large Intestine channel. Pain in wrist is less when stick moxa is applied to area. Condition is worse with cold and damp weather. Bi syndrome is characterized by the obstruction of qi and blood in the



channels due to the invasion of pathogens of wind, cold or damp, as well as heat or blood stasis. Cold bi is characterized by severe stabbing arthralgia with fixed location, alleviated by warmth and aggravated by cold with white fur on the tongue and tight pulse. Damp bi is characterized by soreness and fixed pain in the joints with local swelling and numbness, aggravated on cloudy and rainy days, with white and greasy tongue coat, and soft or slow pulse.

**PROGNOSIS:** Fair; Inflammation of tendons can take several months to heal completely. Reduction of pain is expected through the use of NSAIDs and acupuncture. Plan is to reduce pain by 50% over 7 treatments.

#### PLAN

**Treatment Principle:** Move qi, remove meridian blockages with warmth and resolve dampness.

**Treatment:** Patient travels over 4 hours to clinic. Traditionally, any type of tendonitis treatment involves rest, ice, NSAIDs, stretches, modification of activity, possible corticosteroid injection and possibly surgery. Thumb spica splint that immobilizes thumb, preventing hyperextension, may help.

Rest, or modification of activity, is not likely to be viable components of treatment with this patient, who uses her hands for daily chores.

Ice is not available in rural Nepal. Both corticosteroid injection and surgery are outside the patient's parameters for availability and affordability.

Initial plan includes acupuncture treatment 1 time per week. Placement of the needles are along the Lung and Large Intestine channel that align with the tendons and muscles of extensor pollicis brevis and abductor pollicis longus. The needle direction is toward the bony prominence. Alternating treatments each week with moxa 1 week and electro-stimulation for 20 minutes the following week. Experimenting with a topical NSAID ointment preparation by crushing 2 x 100mg sodium diclofenade tablets and mixing into 83ml container of petroleum jelly. Patient is being treated with oral NSAID of ibuprofen, 400mg TID for 10 days. Patient is instructed to use topical ointment at night after completing chores of the day. Patient is also instructed to wrap thumb with an Ace bandage to prevent hyperextension during the night while sleeping.

#### OUTCOME

Patient was tested at sixth treatment with Finkelstein test and reported no pain on right wrist and only slight pain on left wrist. At the seventh and final treatment, she reported an overall 75% reduction in pain.

#### CONCLUSION

The use of NSAIDs to reduce and limit the pain, and reduce inflammation with acupuncture and moxa, proved very helpful for this patient. The swellings in both wrists were quite small in area, superficial and seemed to respond well to topical NSAID preparation. However, for larger areas or deeper inflammation, the topical application would not be useful.

Dietary changes, such as using or increasing the dosage of turmeric, may aid in the reduction of inflammation. Initial diagnosis was carpal tunnel syndrome. However, with further testing and interaction with the patient, De Quervain's syndrome became more likely. Both these syndromes are due to repetitive stress injury. Treatment over time changed to focus more on the hyperextension of thumb and associated tendons and ligaments, and less on the wrist compartment.



## CASE STUDY: Chronic Non-Healing Ear Ulcers

Tiffany Forster LAc

### OVERVIEW

15-year-old female presents with purulent, non-healing ulcers in the right ear canal. After 20 treatments, using an integrative approach that included Chinese herbal medicine, acupuncture and antibiotics, the patient experienced a reduction of pus, reduced pain and itchiness. However, the condition did not resolve. The treatment and investigation became directed towards possible skin staphylococcus, otomycosis (a skin fungal infection), skin tuberculosis and acquired cholesteatoma. A referral for further investigation is necessary for a definitive diagnosis.

### SUBJECTIVE

15-year-old patient presents with non-healing, suppurative ulcers of the right, external ear canal. The patient reports she has an 8-year history of upper respiratory tract infections (URTI) and ear infections with the ear ulcers. With the use of an unknown quantity of antibiotics and eardrops, there has been no resolution of the ulcers. The ulcers developed to this severe stage 1 year ago and have gotten continually worse. She reports intermittent pain and itchiness with constant, copious amounts of thick, sticky pus. The hearing in the right ear is diminished. The submandibular glands are occasionally swollen bilaterally. She suffers from intermittent headaches. The patient does not show any symptoms of an acute infection, as there is no fever, intense pain, painful swollen glands or an acute sore throat.

### OBJECTIVE

On first inspection of the ear canal, an accumulation of chronic, inflammatory cells are evident with a copious amount of pus being produced. Initially, the tympanic membrane is not visible.

The location of the ulcers are a third of the way down the ear canal at 5 o'clock with a bigger ulcer half way down at 12 o'clock. They are inflamed, suppurative and crater-like with a definite circumference.

With consistent treatment, the less deep ulcers clear to expose a larger ulcer at the end of the ear canal at 1 o'clock. It appears to be partially covering the tympanic membrane. It is unclear if the tympanic membrane is affected. Upon asking if the patient can taste the vinegar being used to alter the environment of the ear, she claims she cannot, indicating tympanic membrane is intact.

Upon inspection of the left ear, no redness is observed, nor associated pain or itchiness noted. The tympanic membrane is intact.

TB mantoux test and TB sputum test – both negative; For a definitive result, a skin biopsy and pus culture is necessary. The pus culture determines which bacteria is present in order to find the antibiogram, which can determine a bacteria's sensitivity to an antibiotic.

Initially, when cleaning the debris in the ear, up to 10 cotton swabs were necessary. After 15 treatments, only 2-4 cotton swabs were used, indicating a significant reduction in pus secretion.

### ASSESSMENT

**DX:** Non-healing, suppurative ulcers of the right external ear canal

The body's ability to heal the ulcers is compromised due to the location at the deep end of the external ear canal, poor visibility and difficult access, and the chronic nature of the disease. The ulcers



respond to the antibiotics and antifungals, but do not heal completely. Possibly, the wound has become antibiotic-resistant over the years. An infection of the middle ear cannot be ruled out, as it is impossible to investigate under the circumstances.

Possible cutaneous staphylococcus infection: A culture is required to identify.

Otomycosis: Fungal infection of the external ear canal; Malodorous discharge, inflammation, scaling, severe discomfort and itchiness with minimal pain characterize fungal infections. A culture is required to identify for exact diagnosis and appropriate treatment.

Skin TB: Non-healing wound is the main symptom of skin TB. Characteristic histopathological features on skin biopsy and pus culture confirm the diagnosis.

The patient experiences a combination of all of the above symptoms at differing times. Further testing is required for complete and accurate diagnosis.

Acquired cholesteatoma: Cholesteatoma can give rise to a number of appearances. If there is substantial inflammation, the tympanic membrane may be partially obscured by an aural polyp. The presentation of this disease penetrates into the middle ear and should be considered. Further analysis is recommended to rule out potential for this condition.

TCM DX: Chronic, turbid, damp-heat in the external ear canal

It is most likely that the ulcers began with a channel pathology of an external invasion. Over time, the chronic and damp nature of the condition has become more systemic.

Lung qi and wei qi are affected due to the history of URTI. The Lung system is the most exterior organ and is the first internal organ typically affected by external pathogens. The Lung system includes the skin and is associated with wei qi. As the wei qi becomes weakened, the body's ability to have a strong defense becomes negatively affected.

Spleen and Stomach qi deficiency due to the chronic nature of the condition. One of the Spleen's functions is to identify the turbid and to transform and transport this pathogen. The Spleen also produces and stores white blood cells that clean bacteria from the blood. This function is important in tissue regeneration and in stimulating an immune response in the body. The cold nature of antibiotics damages the Spleen and thus the ability to be effective in healing the chronic nature of the ulcers.

### PROGNOSIS

Poor prognosis without the skin biopsy and pus culture to identify the pathogen as bacterial, fungal, skin TB or drug-resistant skin TB. Infection is the single most likely cause for the delay in healing. The inflammatory phase has become prolonged because of the chronic nature of the condition. With ineffective, yet consistent treatment, both internally and externally, surgery is recommended because of the excessive granulation of the tissue that is hindering the re-epithelialization of the local area. Alternatively, with the confirmation of skin TB, the healing will occur with the use of appropriate medication. The potential for a good prognosis is possible if the above recommendations are followed.

### TREATMENT

Due to the chronic nature of the ear ulcers, therapy is adjusted throughout the process. Treatment is according to the nature of what the patient is reporting and how they present over the course of 1 month. Below is an outline of the sequential treatments.

The following is done at every treatment from the beginning.

- Acupuncture: Ear tacks applied every 2- 3 days to San Jiao 17 and 21, Gallbladder 2 and Small Intestine 19. These points are used locally to activate circulation and decrease inflammation.

The following occurred at the same time. The pus decreased before plateauing and never fully resolved.

- Internal antibiotic Chinese herbal medicine (CHM) Huang Liang Jie Du Tang 7 days
- External antibiotic CHM Huang Liang Jie Du Tang mixed with Neosporin 10 days alternating days
- Aural saline flush on alternate days for 7 days

After the above stopped working, the following was prescribed.

- Azithromycin, 500mg PO for 5 days
- Aural vinegar flush on alternate days for 8 days
- Cloxacillin, 1gm TID for 7 days

Once the antibiotics stopped working, a fungal approach was taken.

- Antifungal ear drops 4 drops TID for 1 month
- Fluconazole 150 mg PO once per day for 3 days, then once per week for 3 weeks

The following was prescribed to support the digestive system.

- Internal CHM Si Jun Zi Tang taken over the 4 weeks of treatment

The following was prescribed at the end of the treatment plan to help boost the immune support and aid the ear.

- 50% colloidal silver/50% rubbing alcohol ear flush, 4 times per week for 2 weeks
- Multi vitamin and 500mg vitamin C taken daily – long term

### OUTCOME

After the initial 5 treatments, it became obvious that the ulcers were difficult to heal and would require different approaches in the attempt. Through the observation of changes over a series of 20 treatments, the plan was adjusted 3 times. The patient reported decreased itchiness, pain and discharge. As soon as the medicines were completed, however, the itchiness reappeared, but to a lesser degree. The discharge also increased, but to a lesser degree than when she initially started treatment. All of this was indicative that the ulcers were still present.

### CONTINUING TREATMENT

The patient and her family were informed that further investigation was necessary. With the consistent treatment that she had been receiving, to act on the referral that had been given would ensure the resolution of the non-healing ulcers. To continue using the antifungal eardrops, taking a multi-vitamin and extra vitamin C would be beneficial in the support of her immune system.

### CONCLUSION

This has been an interesting and important case, as it not only demonstrates the efficacy of using an integrative approach, but it also highlights the ability of acupuncture to serve as an initial access point of care in which the patient received regular treatments and the opportunity to closely follow her progress and therefore prognosis. Significant improvement has been achieved, clearing the way for the definitive understanding that a referral to the appropriate hospital is necessary. A referral for investigation and/or surgery has been written bringing attention to the patient's lower income status. This is imperative for the family so they are not subjected to unnecessary financial burden. This can, otherwise, have a significant effect on the family not following through with the investigation necessary for the ulcers to resolve.

## CASE STUDY: Dupuytren's Contractures

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### OVERVIEW

58-year-old male presents with persistent contraction of 3rd, 4th and 5th fingers of right hand. He reports it began insidiously 3 years ago, and that it might be due to a leech bite from 25 years ago. After just 3 treatments using electro-acupuncture and manual therapy, passive and active range-of-motion have improved by 35%. To be limited in hand dexterity in this rural country is traumatic and debilitating. Acupuncture is a quick-acting and cost-effective alternative to surgery. This is especially important for this case where health care access and financial resources are limited.

### SUBJECTIVE

58-year-old male reports leech bites in right palm 25 years ago. Palmar thickening and finger contraction of 3rd, 4th and 5th digits began insidiously 3 years ago. He can flex the fingers, but cannot actively extend them past the point where they are locked. His 4th digit is the most severely affected, followed by the 5th, and then 3rd. There is no pain involved. No other areas of the body are affected.

### OBJECTIVE

Patient's weight is proportional to height. His demeanor is jovial and he is engaging in conversation. With acupuncture, he is a little "needle-sensitive" in that he reflexes and jumps with each needle insertion, and has a difficult time relaxing, even after needles are inserted.

Upon first visit, he presents with unyielding contraction of 3rd, 4th and 5th digits in his right hand. There is puckering of the skin at the base of the 4th finger on the palmar surface that is about 8x5mm, and another at the base of the 5th finger that is about 5x2mm. No nodule is palpated.

The metacarpophalangeal joints (MCPJ) of the 3rd, 4th and 5th digits can actively extend 160°, 20° and 30° respectively. Passive extension at the MCP past this point is not possible.

The proximal and distal interphalangeal (PIP and DIP) joints of the 4th finger are also contracted and unable to extend actively or passively. The PIP extends to 90°, and the DIP to 130°. Upon palpation of this finger, tendons are hypertonic and cordlike on both sides.

Pulse is wiry. Tongue is pale with a peeled coat.

### ASSESSMENT

DX: Dupuytren's contracture

This is a condition of the palmar fascia that causes progressive contraction of the fingers over the course of time. Etiology is unknown. Some doctors believe it to be autoimmune. Risk factors include men over age 50, smokers, diabetes and family history. Other correlations include alcohol abuse, HIV infection, epilepsy, trauma and manual labor with vibratory exposure. History and a physical intake are usually sufficient for diagnosis, but ultrasonography can illustrate thickening of the palmar fascia and cords, and presence of a nodule.

Physical assessment of the hand, and lack of pain, are the main indicators for the diagnosis of Dupuytren's contractures. However, subjective information that would have been helpful, and relatively easy to gather, includes family history – Dupuytren's contractures is



usually hereditary, smoking history – smoking can constrict blood vessels and decrease flow to the extremities, alcohol intake – alcohol is a risk factor in Dupuytren's contracture (as well as creates heat in the Liver in Chinese medicine) and occupation – most of the patients in this geographical area of Nepal are farmers who tend to overuse the flexors and lack exercises to work the extensors in the hands. Knowledge of past treatment or whether he had been given information concerning his condition would have been helpful to know in order to better assess the type and quality of care currently available in rural Nepal. Knowledge of activities that the contracture affects in his day-to-day life would be helpful to better assess his improvement in terms of quality-of-life.

Helpful objective measures that should have been taken include fasting blood glucose levels. Diabetes mellitus, as said above, is another risk factor for Dupuytren's contractures. Nail changes and hypertension may indicate a more systemic Liver pathology in Chinese medicine, as described below.

DDX: Digital flexor tendinitis and tendosynovitis (trigger finger) also involve thickening of the palmar fascia and tendons. However, it is an inflammatory condition and usually involves pain with flexion, and snapping or popping of the finger with movement.

Scleroderma (systemic sclerosis) is an autoimmune disease that causes scar tissue formation in not only the skin, but also the internal organs leading to an array of signs and symptoms. It is often associated with Raynaud's phenomenon with exaggerated symptoms when exposed to cold temperatures.

TCM DX: Tendon disease may be due to a Liver pathology. Signs

and symptoms relating to the Liver include changes in vision, nails, irritability with anger, hypertension and headache. Patient also reports burning urination with negative urinalysis findings.

If no systemic Liver signs and symptoms are found, then a TCM channel pathology is most likely: Qi and blood stagnation in the hand Taiyang, hand Shaoyang, hand Jueyin and hand Shaoyin.

### INITIAL PLAN AND TREATMENT

Begin with 10 acupuncture treatments, 2 to 3 times per week, before reassessing diagnosis and treatment plan.

Use acupuncture with electro-stimulation to break up and open fascia around the cords. Stimulate extensor digitorum and extensor carpi ulnaris with electro-acupuncture. Gua sha (a manual scraping technique with a ceramic spoon) after each acupuncture treatment to aid in breaking up the palmar fascia.

Electro-acupuncture from Ah Shi point in belly of extensor carpi ulnaris to an Ah Shi point in belly of extensor digitorum. Use 2/100Hz; a high 100hz frequency is used to stimulate muscle contraction. It is mixed with 2hz is to prevent accommodation and muscle fatigue.

Surround fibrous nodules of skin on palmar surface. Because patient is needle-sensitive, only 1 cord (2 leads) is used around the larger node. Use electro-stimulation at 2hz continuous microamperage to break the fascia and regenerate tissue.

In Chinese medicine, the tendons are the tissue associated with the liver. Therefore, systemically soothe the Liver qi to aid in healing and to prevent recurrence in the future. In addition, nourish Liver blood to nourish the tendons. Point combinations to take into consideration include LI4, LV3, LV8 and ST36.

### OUTCOME

After 3 acupuncture treatments with local needling, the 4th and 5th digits improved about 35%. Degrees of active extension of 3rd, 4th and 5th fingers at the MCP were 160°, 90° and 90° respectively. The PIPJ and DIPJ of the 4th finger also improved, and can extend to 120 and 160 degrees respectively.

### PROGNOSIS

With electro-acupuncture and manual therapy, after 12 treatments, 60% improvement is expected. If patient massages palmar surface, stretches daily and continues to extend the "healthy" fingers of the same hand, in conjunction with another 12 acupuncture treatments, 80-100% improvement is expected.

### CONCLUSION

Hand dexterity is significant to quality-of-life. Without such movement, life is debilitating. Acupuncture offers a safe, cost-effective and relatively quick-acting treatment for this patient's Dupuytren's contracture. Other options would have included costly surgery including further analgesic medication and potential complications, or no intervention and thus further progression of contraction. The treatment and plan are simply practical, and with continuity of care there is sufficient time to be able to educate about the pathology, to reduce risk factors in order to reduce odds of a relapse, and offer home exercises for the condition.



Initial presentation



After third treatment



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