Contemporary Chinese Pulse Diagnosis and Pain

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t first glance practitioners may not see the importance or relevance of diagnosing pain, a **_** subjective sensation of one's patient, from reading the pulse as patients tend to report any experience of pain to their practitioner. This article, however, will address pain from multiple approaches and organ systems and demonstrate the value of perceiving the imbalances that lead to, contribute to, and reflect the manifestation of pain directly from the pulse at the radial artery using Contemporary Chinese Pulse Diagnosis (CCPD). Utilizing a diagnostic tool as sensitive as CCPD, one is not limited to the two common explanations of pain, i.e. Qi and/or blood stagnation, and bi obstruction syndrome. While we can indeed diagnose these from the pulse, using the 28 pulse positions and 80 qualities from CCPD, as well as some unique concepts from Contemporary Oriental Medicine® (COM), we can broaden our concepts to include the pulse diagnostic categories for pain as described below.

Before addressing the diagnosis of pain from the pulse, it is incumbent upon us to assert our belief in the intrinsic knowledge of our bodies and the importance of our symptoms as reflecting messages that should not be discarded. Pain, or any other symptom, is not some annoyance to simply be eradicated. It is a clue, a signal of a deeper imbalance that must be understood prior to a treatment strategy designed to eliminate its symptom. Pain has multiple causes and the eradication of the pain with symptomatic branch treatments eliminates a vital message and opportunity to treat a deeper level of imbalance and can be a disservice to our patients. CCPD enables the practitioner to delineate the root cause of one's pain and target treatment accordingly.

This ecological understanding of our symptoms and our bodies is imperative considering that pain treatment is one of the most commonly accepted areas for patients to seek acupuncture. Moreover, there are a variety of different acupuncture pain systems being practiced today, as well as in the continuing education arena, like the Balance Method, western anatomical approaches, medical acupuncture, and others. We are not suggesting these systems aren't effective for pain (indeed, the authors are both trained in and utilize some of these systems on occasion), or even that they can't be used to address underlying root causes, but rather they are often aren't considered from that vantage point. An obvious example is that we can treat a patient's chest pain balancing the meridians or releasing the sinews, yet have no diagnosis or treatment of the potential heart blood stagnation that may be underlying. To treat in this way can be lifethreatening to the patient. The chest pain may be eliminated, but we are missing an opportunity to address potentially life-threatening condition. Understanding the root causes uncovering the details via CCPD, one can treat pain and simultaneously treat the root with a pointed acupuncture prescription that incorporates the varied facets of the individual's diagnoses.

It is also important to note that the following examples of pulse qualities and interpretations are not fixed; they are open to broader interpretations that are explained below. What follows is some of the most common examples found from the collective clinical experiences of CCPD practitioners. It is by no means an exhaustive list.

- 1. <u>Tight-Wiry</u>: The Tight-Wiry quality in an individual pulse position can reflect pain, other than the typical association of yin deficiency (Tight) and yin-essence deficiency (Wiry). In this regard, it is usually attributed to (a) an inflammatory process or (b) an excess cold condition. Other presenting signs and symptoms will assist in the differentiation. We note also that the Wiry quality, as we define it "thin, hard and cutting to the touch" (Hammer 2005, p. 349), indicates an extreme level of pain.
- 2. Choppy: The Choppy quality wherever it is found is indicative of blood stagnation (and under specific conditions suggests an overwhelming burden of chemical toxicity). Wherever this quality is seen, pain can be a likely result. Common positions include: the

left distal position with chest and left shoulder pain due to occlusion of the coronary arteries, the Proximal positions and Pelvic Lower Body (PLB) positions with lower abdominal pain due to endometriosis and uterine fibroids, the Oesophagus position with reflux associated pain and/or Barrette's oesophagus, and the Gall Bladder complementary position with abdominal pain [hypochondriac and right shoulder] and the sequel of symptoms resulting from gall stones. The Choppy quality in the proximal positions and PLB has been significant with dyspyrunia.

- 3. <u>Tense and Robust Pounding</u>: These qualities suggest Qi stagnation with concomitant excess heat that develops from the struggle between the attempt to eradicate the stagnation and an immovable object. Typically, this type of pain will be characteristic of a Qi disorder and present with dissention and a feeling of fullness, whereby the Choppy quality discussed above will reflect more blood stagnation and fixed pain that's sharp in nature.
- 4. Increased Rate on Exertion and Heart Blood deficiency: Early in one of the author's careers while growing his practice he spent a few days per week treating patients in a physiatrist's office. These patients would generally come in as their last resort in a process that spanned close to a year, first trying numerous pain medications and injections, then at least two rounds of physical therapy, each lasting a few months, then referred to acupuncture. Some had been in the 'system' for many years with no relief of their pain. These were the motor vehicle accident patients that sustained injuries that did not heal, that left their victims in significant chronic constant pain. While all completely unique in their presentations, background, histories, and review of systems, one of the findings that was consistently found in every patient was a moderate to severe Heart blood deficiency as diagnosed by CCPD wherein their heart rates would elevate greater than the normal 8-12 beats after exertion. Typically, these patients would have rates that increased at least 25 to 30 beats above their resting rates, and quite often patients' rates would increase in the 30s and 40s. We measure this by having the patient stand up and swing their arm vigorously 10 times then count their rate for 10 seconds and multiply by 6. It is not uncommon in chronic pain patients for their rate on exertion to increase well above the normal 8-12 beats. This becomes a very significant finding. It suggests inadequate blood supply and circulatory capacity and an impaired ability to heal.
- 5. <u>Complementary positions on lateral radial</u> aspect: Within CCPD exists a set of pulse locations

- dedicated to more of the structural aspects of the body wherein the radial aspect of the distal positions will reflect more of the head and upper body; between the distal and middle positions reflects the diaphragm, chest and back; between the middle and proximal positions represents the lower abdomen and back; whilst below the proximal positions represents the knees.
- 6. Flooding Excess and Infection: This pulse wave when found in an individual position can reflect local pain from an infectious process. One of the more common places to find this is in the Right Proximal Position with a urinary tract infection or a prostate infection. This can often occur with Tight, Robust Pounding and Rapid qualities. Infection in the pelvic area is usually indicated by the Slippery quality in the Pelvic Lower Body positions and usually is venereal in origin. The Flooding Excess quality in the Right Proximal position has also been associated often with Crohn's disease (Regional Ileitis) as well as bladder infection, and in the Left Proximal Position with ulcerative colitis. All of these can be painful.
- 7. <u>Complementary positions</u>: There are 22 complementary positions in CCPD in addition to the 6 principal positions of the major organ systems. A few of the most commonly found in the context of pulses signifying pain include:
 - a) Gall Bladder: Tight-Wiry and Choppy --> indicates presence of pain due to gall stones; Choppy here is a sign of micro bleeding and the deterioration (necrosis) of the GB wall.
 - b) Oesophagus: Tight, Rough, Inflated and Choppy --> reflux pain;
 - c) Stomach Pylorus Extension: very Tight-Wiry and Choppy --> pain and micro bleeding probably due to an ulcer; Slippery at the Stomach Pylorus Extension position is the most significant sign of an ulcer.
 - d) <u>Pelvic Lower Body</u>: Choppy Tight or Muffled --> pain due to fibroids, cysts, endometriosis, etc; dyspyrunia.
 - e) Neuropsychological: very Tight --> pain due to intractable headache often due to trauma, which is a very important finding due to the gross underestimation of trauma with chronic headaches.
- 8. <u>Tight Empty and Vertex Headache</u>: The Liver yang rising scenario is a deficient condition; it results from a lack of yin, not an abundance of yang. At the point where the Liver yin is no longer able to anchor the Liver yang, we encounter a Tight Empty quality in the

Left Middle position (reflecting a 'separation of yin and yang' in the Liver; see The Separation of Yin and Yang, Part Two, by same authors, Chinese Medicine Times Vol. 3, Issue 2, 2008). One textbook symptom of this condition is the vertex headache.

- 9. Choppy and Chest pain: While chest pain can have multiple aetiologies, one of the more critical presentations includes a Choppy quality in the Left Distal Position reflecting blood stagnation in the coronary arteries. Being able to identify this configuration is of significant importance. Other presentations include a positive Pleura. It is also important to reiterate the sensitivity of the pulse as a tool for preventive medicine; the pulse often exhibits signs of the underlying condition before the symptoms are advanced. This degree of discernment is considered an indication of advanced clinical skill from the days of Bian Que to the present.
- 10. Deep or Hidden and Low back pain: We are all familiar with the association of the lumbar area and the spine/skeletal system to the Kidney system. When we encounter a Deep or Hidden quality in the proximals it is a sign of Kidney Qi-yang deficiency (8th stage) and trapped cold internally, respectively. A hallmark symptom with this finding will be lower back/sacral pain and/or knee pain. In addition to this association, because of the Kidney Qiyang deficiency, we will see an overall lack of metabolic heat to drive the Qi and a potential for pain in multiple regions, depending on the patient's underlying constitutional weaknesses, areas of past trauma, etc.
- 11. <u>Choppy and Endometriosis</u>: When we encounter a Choppy quality in the Liver, Proximal positions and Pelvic Lower Body one can make a fair assumption as to the presence of lower abdominal pain, in women often a sign of endometriosis and/or other signs of blood stagnation in the uterus and pelvic organs.
- 12. <u>Liver Blood and Heart Qi Deficiency and fibromyalgia</u>. Dr. Hammer has written on this topic (see Medical Acupuncture, September 1, 2008, 20(3): 141-145.) Essentially, this is a function of inadequate Liver Blood to nourish the sinews and/or a Heart Qi deficiency with impaired delivery/circulation to the surface and peripheral nervous system. Signs on the pulse of Liver Blood deficiency include a Thin or Tight quality at the Left Middle position and/or a Hollow quality and/or Reduced Substance and/or Leather. The signs of Heart Qi deficiency were outlined above.
- 13. Choppy and Pain due to toxicity: One of the

principal conditions associated with an overwhelming burden of chemical toxicity is joint pain that moves from large joint to large joint. It is commonly encountered in those exposed through work, where repetitive stress also creates an increased vulnerability, and a further deleterious influence on the circulation. In addition, the symptoms of fatigue can often complicate the picture. Patients with this will find little relief of their symptoms through conventional treatment, either with ubiquitous herbal formulas, such as Bu Zhong Yi Oi tang (Tonify the Middle and Augment the Qi Decoction) for a supposed Qi deficiency, or formulas that are designed to address symptoms of Wind-Cold Damp, such as Du Huo Ji Sheng Tang (Angelica Pubescens and Sangjisheng Decoction). Furthermore, the conventional treatment through Western medicine often further complicates the symptom picture through the administration of pharmaceutical chemicals that are potentially toxic to some degree, and that more importantly, the patient is ill-suited to metabolize. The path out of this lies in identifying the Choppy pulse quality as a First Impression at the onset of the CCPD pulse diagnosis methodology, or at the Left Middle Position (and often at the Special Lung positions and Right Middle position). A novel method of evaluating the pulse while releasing pressure from the Organ through the Blood and Qi depths may also reveal a quality termed Blood Unclear. As one releases pressure, the width of the sensation slightly expands at the Blood Depth reflecting some turbulence and quickly returns to the normal sine wave shape. Over time the pulse becomes Deep. Dr. John Shen likened this pulse quality to a glass of water with some sediment in it. Another confirming sign is observed by assessing the mucosa of the lower eyelid, where the blood vessels will be of varying length and width, and may have a slightly brown hue. Examining the tongue one finds either a slightly red body with a moist yellow coat, or a withered tongue body and a slightly purple colour, and especially dark vertical lines indicating the toxicity. The veracity of these methods for assessing chemical toxicity can often provide an immediate inroad to achieving the correct diagnosis. What follows illustrates the readiness with which it can be readily established.

A patient presents with a history of intractable migraine headaches. After completing a thorough history, which indeed supported a number of potential diagnoses according to normative practice, including Liver Qi Stagnation, attention was focused on the time period when the patient first experienced the migraines. While it also coincided with her marriage, the only other obvious correlation was with the oral

contraceptive she continues to take. The pulse revealed immediate evidence of toxicity, as described above, as well as the unique findings in the mucosa of the lower eyelid. The patient was urged to discontinue the oral contraceptive. She declined. Nevertheless, the treatment was based on the principle of relieving this burden of toxicity, and her headaches were readily relieved. The role of the Divergent channels to translocate Retained Toxic Pathogens to joints causing pain is also a significant diagnostic aspect of CCPD.

14. <u>Temporal factors in pain syndromes</u>: There are many approaches to understanding the temporal influences in painful conditions. One of the most prominent relies on an understanding of the daily rhythm of Yin and Yang. But Yin and Yang can also be approached in terms of the level of activity of an individual, and not just in terms of macrocosmic cycles. In this reading, the most telling issue is the balance between the Yang of activity and the Yin of rest. So, in terms of the microcosm, we turn our attention to the Sun of the body: the Heart. Patients often present with pains that are at worst upon waking, and usually marked by stiffness. They will note how the level of pain and stiffness is ameliorated by daily activities, only to become aggravated upon the culmination of activity at the end of the day. Then, fatigued, that patient retires, only to begin the cycle anew the following day without relief. The telling issue here is the role of the Heart in governing the circulation. In effect, this is a pattern that demonstrated the deficiency of Heart Qi, because as the body rests and the heart begins to work less, even against a reduced demand for peripheral circulation, the circulation slows and gives rise to stiffness and pain derived from a lack of movement. Upon awaking, the patient's activity increases giving an almost mechanical boost to the circulation, and thus ameliorating the symptoms. However, again due to the degree of deficiency, the activities of daily living can be taxing to the deficient patient, and the symptoms then worsen by the end of the day. In terms of treatment, it is absolutely necessary to address the Heart Qi deficiency to resolve the pain and stiffness. From the pulse there are many indications of Heart Qi deficiency. Some of the most common include (1) a slow heart rate; (2) an increase in rate on exertion of less than 8 beats per minute (this is a more serious sign of Heart Qi deficiency); (3) Change in Intensity/Amplitude in the Left Distal position of a four or five; (4) any Reduced qualities in the Left Distal position (Reduced Substance, Deep, Diminished, etc.); and (5) the Unstable quality.

15. Heart/Circulation: We have written previously about the role of shock to the heart and its effect on circulation. Trauma can be divided into physical and emotional aspects. It is noted that physical traumas usually involves an emotional component. Pulse qualities such as Inflated, Flat, Choppy and Rough Vibration can be used to isolate the location of a physical trauma. Signs such as horizontal lines in the mucosa under the eyelid and purple ecchymosis on the tongue can be found ipsilaterally. In peripheral, physical trauma, the face will be pale when compared to the hands. As the heart works to overcome the stagnating effects of trauma on Qi and Blood, it weakens over time, causing a Slow rate and more deficient qualities as described above. In emotional shock, the effect on the heart is more direct. Signs include Rough Vibration over the whole pulse encountered as a First Impression, an elevated rate, and signs at the Left Distal Position including Flat, Inflated, and even Absent, depending upon other pulse signs and the state of the body condition at the time of the insult. The first effect of shock to the heart is a Yin deficiency. With shock and with very severe pain associated with any organ, solid or hollow, Dr. Hammer has reported the Spinning Bean that feels like a splinter in the affected position (Hammer, personal communication November 2008). Pain conditions often arise secondary to a disruption of circulation and include conditions as varied as myofascial pain syndromes, migraine, reflex sympathetic dystrophy, and Irritable Bowel Syndrome, all of which can be predicated upon a disruption of the Heart's role in circulation, and likewise its role in housing the Shen. In western terms this implies a disruption of the balance between sympathetic and parasympathetic activity as they affect the circulatory system, and cause dilation and constriction of blood vessels (Scaer 2005, p. 213).

16. The Liver: As described above, often imbalances in the Liver can reflect in areas in which the Liver presides. Very often, however, the Liver will not keep its own pathology, but rather attacks wherever it finds a vulnerability. Very common scenarios involve the Liver invading the Spleen and Stomach with digestive symptoms resulting. Another very common clinical scenario is where the Liver will attack the pelvic organs causing an interstitial cystitis. In both pathologies, the Left Middle position will show excess, i.e. significant Robust Pounding, often accompanied by signs of Liver Blood stagnation. In the scenario of Liver invading the digestive system, often a positive Ulnar Liver Engorgement position is found, as well as deficiency in the Right Middle position making the digestive organs vulnerable to the excess Liver

energies. With the interstitial cystitis often Tight and Choppy qualities will be found in the Pelvic Lower Body positions as well as in the Proximals, reflecting the Bladder. A note to keep in mind is that Liver Qi deficiency is more of a cause of sluggish digestion [food and Qi stagnation] than Liver Qi stagnation and 'attacking' Liver Qi. Liver Qi controls the vectors of Qi dynamic for all organs, including moving Stomach Qi downward and when it is deficient the Stomach Qi will be hampered.

- 17. <u>Nervous System Tense</u>: The hyper vigilance that accompanies the Nervous System Tense personality often presents with the ubiquitous aching neck and sore trapezius syndrome. A discussion on Nervous System Tense can be found in our previous article, An Introduction to Contemporary Chinese Pulse Diagnosis, Chinese Medicine Times, Vol. 2, Issue 5, 2007. The CCPD configuration would be a Tense quality in the principal positions as well as a Tight quality at the Qi depth.
- 18. Sudden cessation of exercise: The Yielding Hollow Full-Overflowing pulse, accompanied by a normal to slightly Rapid rate, indicates the sudden cessation of often intense over-exercise. This is classified as a Qi Wild condition. The aetiology, which is seen with increasing frequency, involves a disruption of the functional relationship between the diameter of the blood vessel and the volume of blood circulating. "The vin blood and the yang vessel walls become functionally dissociated" (Hammer 2005, p. 261). It is often the case that the presenting symptom is migrating joint and muscle sprain that may also accompany cold extremities. As an indication of a Qi Wild state, however, the more pressing concerns are the symptoms that accompany the pain: namely fatigue, anxiety, panic, depersonalization, dissociation and explosive anger.
- 19. Heart Full and "whole body discomfort": Trapped Qi in the heart is a condition Dr. Shen termed Heart Full. The Inflated pulse, particularly at the Left Distal Position, indicates the condition. The condition evolves from prolonged birth with the head in the birth canal, such as in breech presentations, or from overwhelming experiences at a time when the person is relatively robust or trauma to the chest. One pain condition associated with the disruption of Qi and Blood circulation is a pervasive feeling of whole body discomfort (Hammer 2005, p. 414).
- 20. <u>Spinning bean</u>: The Spinning Bean quality can often signify extreme pain, typically of a traumatic nature (Hammer 2005, p.375). This quality was also

found once by Dr. Hammer with an intractable stomach ulcer (personal communication Dr. Hammer Oct. 2008). Wherever it is found will represent significant pathology.

While certainly not exhaustive, our purpose in this article is to demonstrate the role that a thorough going examination of the pulse often reveals causes and effects of typical and commonly encountered pain conditions. As such, CCPD fulfils a need for the practitioner, namely providing the insight that leads from a set of symptoms and signs, especially gleaned from the pulse, directly to a diagnosis, treatment principle and treatment. In other words, it is "the dream of every Chinese medicine practitioner," as Heiner Fruehauf has written of the Six Conformation model (Liujing Bianzheng). The importance of diagnosing in this way brings reverence back to the art of Chinese eliminates the medicine and common misunderstanding that acupuncturists are technicians, but rather that we are clinicians of the highest calibre.

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