

Herbal Alternatives to Drugs in Pain Management, Part II

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Editor's note: Part I of Dr. Chen's column appeared in the May issue of *Acupuncture Today*.

Traditional Chinese Medicine

According to traditional Chinese medicine (TCM), the fundamental etiology of pain is *qi* stagnation, blood stagnation, or both. It is often said that where there is pain, there is stagnation; where there is stagnation, there is pain. Therefore, effective pain relief most often requires the use of herbs that activate *qi* and blood, removing stagnation and thus resolving the cause of pain. As is true in all treatment involving Chinese medicinal herbs, they are most commonly prescribed in carefully-combined formulas (rather than singly) that directly address the causes and/or symptoms of the imbalance and treat without creating unwanted side-effects or complications.

In addition to treating *qi* and blood stagnation, successful treatment of pain also requires careful differential diagnosis of pain. The three main diagnostic keys are the location of the discomfort, the type of pain and the cause of pain. Location refers to the exact part of the body that is affected: upper body, lower body, external musculoskeletal muscle, internal smooth muscle and so on. The type of pain refers to the characteristics of the patient's pain, such as a sharp, stabbing pain or dull aching, pain at a fixed location as opposed to migratory pain, pain helped by cold or by heat, and other distinguishing characteristics. Lastly, identifying the cause of pain helps the practitioner differentiate soft tissue injuries from structural damage. For example, leg spasms and cramps often involve only soft tissue, while an acute sprained ankle is often accompanied by structural damage. Accurate evaluation of these three criteria is crucial for greatly enhanced diagnostic accuracy and successful relief for the patient.

Herbal Treatment for Headache

Headache pain may arise from internal or external causes such as invasion of wind, cold, heat, dampness, dryness, summer heat, accumulation of phlegm, and other pathogens in addition to *qi* and blood stagnation. Headache pain may represent excess or deficient conditions and may affect the occiput, vertex, sinuses and orbital region. It may also present with a complex of locations/symptoms, such as in migraine.

Corydalis (*yan hu suo*) is one of the strongest herbs available to relieve pain and reduce inflammation. Research studies have shown it to work directly on the central nervous system with analgesic effects

comparable to those of morphine and codeine.^{1,2} Another herb, pueraria root (*ge gen*), has demonstrated remarkable effectiveness in relieving headache pain.^{3,4,5} Other herbs have proved effective in relieving various types of headaches, including (but not limited to) migraine, vertex, sinus and orbital headache.^{6,7,8}

Many classical Chinese herbal formulas are also commonly used to treat headache. Cnidium & tea formula (*chuan xiong cha tiao san*) treats headaches due to wind cold. Evodia combination (*wu zhu yu tang*) relieves vertex headache due to cold and is also used to treat migraine. Coptis, phellodendron & mint formula (*huang lian shang qing wan*) addresses headache caused by heat. Notopterygium & tuhuo combination (*qiang huo sheng shi tang*) treats headache due to wind and dampness. Gastrodia & gambir combination (*tian ma gou teng yin*) relieves headache secondary to liver yang rising. Eucommia & rehmannia formula (*you gui wan*) tonifies kidney deficiency to relieve headache. Tangkuei & ginseng eight combination (*ba zhen tang*) tonifies *qi* and blood deficiency to relieve headache. Pinellia & gastrodia combination (*ban xia bai zhu tian ma tang*) relieves headache due to phlegm stagnation.

Herbal Treatment for Neck and Shoulder Pain

Neck and shoulder injuries can be divided into two major categories: acute and chronic. Acute injuries are generally characterized by redness, swelling, inflammation and sharp pain. Chronic injuries are generally characterized by stiffness, numbness, discomfort and dull pain.

Acute neck and shoulder problems are often caused by accidents, whiplash, improper sleeping or reading postures, and similar traumas. In addition to pain, redness, swelling and/or inflammation are sometimes present. Treatment consists of reducing pain, swelling and muscle spasms. Herbal formulas are designed to dispel painful symptoms while supporting the healing process. Strong analgesic herbs like corydalis (*yan hu suo*) are combined with anti-spasmodic herbs and blood-invigorating herbs to alleviate pain, promote blood circulation and open the meridian channels.

Chronic neck and shoulder problems are characterized by pain, numbness, stiffness, discomfort, limited mobility, slow recovery or continuing deterioration. Effective treatment must focus on activating *qi* and blood circulation, opening the channels and collaterals, and nourishing the muscles and tendons.

Corydalis is a main herb in the treatment of both acute and chronic neck and shoulder problems. In addition to having strong analgesic properties, it also has a distinctive facility for treating both acute and chronic cases of inflammation.⁹ Corydalis also protects against NSAID-induced gastric and duodenal ulcers by reducing gastric acid secretion.¹⁰

Classical formulas that treat neck and shoulder pain include the following specific applications. Lindera formula (*wu yao shun qi san*) is formulated for shoulder pain, while pueraria combination (*ge gen tang*) is more specific for stiff neck due to cold. Atractylodes & arisaema combination (*er zhu tang*) relieves deficient-type neck and shoulder disorders but may not have strong analgesic effects.

Herbal Treatment for Back Pain

Similar to neck and shoulder pain, back pain can be divided into two major categories: acute and

chronic, with many of the key symptoms described in the categories above.

Many classic formulas tonify the kidney to relieve back pain and weakness. Tuhuo & loranthus combination (*du huo ji sheng tang*) eliminates wind and dampness and has a rapid onset to relieve acute back pain. Herbal formulas that tonify the kidney tend to be slower in action and are more suitable for chronic back pain. Cyathula & rehmannia formula (*zuo gui wan*) is more specific to address kidney yin deficiency; eucommia & rehmannia formula (*you gui wan*) focuses more specifically on kidney yang deficiency; and rehmannia eight formula (*ba wei di huang wan*) tonifies both kidney yin and yang.

Herbal Treatment for Musculoskeletal Pain and Painful Obstruction (Bi) Syndrome

Musculoskeletal pain is often classified as painful obstruction (bi) syndrome. Though there are many causes of this syndrome, cold and heat are the most common etiologies. Cold-type musculoskeletal pain is characterized by stiffness, pain and limited range of motion of the joints. In Western terms, cold conditions are associated with chronic arthritis and arthralgias such as osteoarthritis and fibromyalgia.

Heat-type musculoskeletal pain is characterized by redness, swelling, pain and/or inflammation of the muscles and joints. Patients typically present with muscle cramping and spasms. From a Western perspective, these patients have acute musculoskeletal disorders, typically involving inflammation of the muscles, bursae, tendons and ligaments.

Gentiana macrophylla root (*qin jiao*), a popular ingredient in some remedies, has been shown to have anti-inflammatory activities comparable to those of aspirin (salicylic acid).⁴ Aconite tsao wu (*cao wu*) and aconite wu tou (*chuan wu*) Other herbs have demonstrated exceptional anti-rheumatic, anti-inflammatory, analgesic and anti-pyretic functions.^{13,14}

White peony (*bai shao*) and licorice (*gan cao*) have demonstrated remarkable properties in relieving spasms, cramps and pain of skeletal and smooth muscles. Clinical applications include dysmenorrhea,³ musculoskeletal disorders,¹⁵ trigeminal pain,¹⁶ muscle spasms and twitching in the facial region,¹⁷ pain in the lower back and legs,¹⁸ abdominal pain and cramps due to intestinal parasites,¹⁹ and epigastric and abdominal pain.²⁰

If there are complications to the musculoskeletal disorders described above, classical formulas offer treatment options for the patients. Cinnamon & anemarrhena combination (*gui zhi shao yao zhi mu tang*) treats musculoskeletal and joint pain due to wind heat. Cyathula & plantago formula (*ji sheng shen qi wan*) treats musculoskeletal and joint pain arising from cold. Coix combination (*yi yi ren tang*) treats musculoskeletal and joint pain caused by dampness. Tuhuo & astragalus combination (*san bi tang*) treats musculoskeletal and joint pain due to deficiency of *qi* and blood and weakness of the liver and kidney. If the etiology is unclear, notopterygium & turmeric combination (*juan bi tang*) may be used for relief of general musculoskeletal and joint pain.

Herbal Treatment for Traumatic Injury

Traumatic injury is characterized by severe *qi* and blood stagnation. Types of injuries include bruises, contusions, sprains, broken bones, surgical incisions and related internal trauma, and other physical

traumas.

For complications of traumatic injury, cinnamon & hoelen formula (*gui zhi fu ling wan*) is used to treat internal bleeding after traumatic or sports injuries; persica & rhubarb combination (*tao ren cheng qi tang*) is used to treat subcutaneous bleeding with severe swelling and pain.

Conclusion

Pain is universally understood as a signal of disease and is the most common symptom that brings a patient to a physician.²¹ Western clinical medicine and traditional Oriental medicine share common goals of alleviating pain and eliminating the causes of pain; however, the philosophy and clinical approach to pain management in the two disciplines is very different. Generally speaking, Western drugs have immediate and reliable analgesic effects. Unfortunately, Western pharmaceuticals often cause serious short- and long-term side-effects. In addition, the chronic use of drugs, especially opioid analgesics, is strongly associated with addiction and negative social consequences and connotations. As a result, more and more patients are turning to herbal medicine as their primary, complementary or alternative treatment for pain.

Herbal medicines definitely have outstanding analgesic, anti-inflammatory and anti-spasmodic functions and benefits. However, even though herbs and pharmaceutical drugs have many overlapping functions, they are not directly interchangeable or analogs of each other. The therapeutic effectiveness of herbal formulas is dependent on accurate diagnosis and careful prescription. When used properly, herbs are powerful alternatives to drugs for pain management.

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JULY 2000