



CLINICAL CORNER

Tendinosis and Tendinitis: A Natural Approach to Two Challenging Conditions

Editor's Note: This is the first of three articles on the utility of Chinese herbal patches for clinical conditions seen in AOM practices. Subsequent articles will appear in the December 2019 and January 2020 issues.

Tendinosis and tendinitis are difficult-to-treat conditions. Patients may still suffer from pain, decreased range of motion, and weakness after many types of therapies. Fortunately, the use of transdermal Chinese herbal patches has shown great success in helping patients to heal the condition.

Tendons are thick cords that join muscles to bones. Healthy tendon tissue mostly consists of mature type I collagen fibers, with its tensile strength more than twice that of its associated muscle. Healthy tendons are rarely injured or torn. A small amount of type III collagen fibers is also present in healthy tissue; they are immature, thinner, unaligned with each other and poor on load-bearing.

Tendinosis: CAusation, Characteristics, Challenges

Tendinosis is a chronic tendon degeneration that involves collagen deterioration. It usually occurs in the Achilles tendon, wrist tendon, elbow tendon, patellar tendon or rotator cuff. Symptoms include tendon pain when moved or palpated, stiffness and range-of-motion constraints; as well as tendon thickening and lumps which can be palpable or even visible in severe cases.

Tendinosis results when a tendon is continually overused from repetitive movements without giving the tendon time to heal, causing a reduction in the amount of type I collagen fibers and the proliferation of immature type III collagen fibers. These degenerative changes are triggered by the activation of a stress-activated protein kinase, along with the initiation of programmed cell death. A microscopic view of tendinosis reveals an increase of immature type III collagen fibers, a loss of collagen continuity, an increase in ground substance, and an increase of non-productive

vascularization.

If tendon fiber tearing were the primary problem, the tissue would heal rather quickly. However, scar tissue, calcification and inflammatory cells are often found in conjunction with tendinosis. Not only is collagen rebuilding a slow process, but healing tendinosis also requires components including reversal of cellular damage, optimizing collagen production, improving tensile strength, and removal of scar tissue and calcification. Tendons do not receive the same amount of oxygen and blood that muscles do, especially at the mid-portion of the tendon and at the bony attachment where tendinosis occurs; thus making the healing of tendinosis difficult and lengthy.

Tendinitis: CAusation, Characteristics, Challenges

Tendinitis is a condition in which tendons become inflamed. Symptoms include acute pain, tenderness and stiffness. Tendinitis is most common in the shoulders, knees, elbows, heels, or wrists, which may also be called rotator-cuff tendinitis, jumper's knee, tennis elbow, golfer's elbow, Achilles tendinitis, and carpal tunnel syndrome, respectively.

Tendinitis is caused by an acute injury resulting in microtears when a tendon which has undergone degenerative changes is overloaded with a tensile force that is too heavy or too sudden. The degenerated tendons lose their strength due to the loss of the aligned type I collagen fibers, which are replaced by the bulky and weak type III collagen fibers, therefore making them more vulnerable to injury.

Wellness Recommendation

Both the tendinosis and tendonitis conditions can be resolved or significantly improved by using topically applied Chinese herbal patches which consist of myrhh, Himalayan teasel root, twotooth achranthes root and other Chinese herbs.* If there is only tendon inflammation or a tendon tear, the herbal patch will help accelerate the healing of the tendon injury and resolve inflammation by increasing local blood flow and lymphatic circulation, and accelerating local biological activities geared toward tendon healing. Use of 3-6 patches can help achieve complete healing.

If there is both tendonitis and tendinosis along with nodulations, a second type of patch containing additional ingredients such as clamshell, oyster shell and nacre is also required to help clear the ground substance, scars and calcifications. Use of the two types of herbal patches can help eliminate or significantly decrease pain, increase range of motion, increase strength, and return the patient to normal daily activities.

A Sample Case Study

Successful Resolution of 25 Soccer Players With Acute Tendinopathy — Marco Cazares, DC, Indio, Calif.

The following study presents a clinical review of 25 patients (soccer players) with lower extremity tendinopathy. Of this sample, 14 patients were seen for acute medial collateral tendinitis and six patients for acute deltoid ligament strains. The remaining five patients suffered from knee patella tendinitis associated with Osgood-Schlatter syndrome. A review of all patients yielded the following common symptoms:

- Tenderness
- Joint effusion and edema
- Decreased joint motion by at least 40 percent
- Pain with active motion and weight-bearing

All 25 cases had been submitted to trial therapy using taping orthopedic support. Every patient in the sample was prescribed six herbal patches (48 hours on, 24 hours off).

All 25 patients obtained very good to excellent responses after the first week. For 76 percent of the patients, two herbal patches were sufficient for almost complete symptom resolution. For 24 percent of the sample, four herbal patches almost completely resolved all symptoms. It is noted that the use of herbal patches for the treatment of acute tendinopathy is a promising wellness plan for all practitioners who encounter this condition.

*Other patch herbs: Cassia bark; Chinese angelica; Chinese asfetida; Chinese silkvine root-bark; common flowering quince fruit; doubleteeth pubescent angelica root; incised notopterygium rhizome or root; lesser galangal rhizome; pine nodular branch; prepared Ksnezoff monkshood root; red peony root; and sappan wood.

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