# Alternative Agents for Inflammation and Pain

***Devils claw***

Devils claw is an African plant that was used traditionally for digestive diseases and appetite stimulation as well as for arthritis. Clinical trials have supported its efficacy in the treatment of acute and chronic pain. Preclinical studies suggest that in addition to anti-inflammatory and analgesic effects, the herb has antioxidant and chondroprotective activity. In high quality human clinical trials, devils claw has been as effective as NSAIDs in alleviating pain due to hip and knee arthritis and low back pain. Comparative trials suggested that devils claw is also as safe or safer than NSAID therapy, and no clinical interactions with drugs used in the treatment of arthritic conditions have been reported.

***Corydalis***

Corydalis has analgesic and possible anti-inflammatory effects, and has been used in China for pain relief for many centuries. Corydalis strengthened the analgesia produced by electroacupuncture (Hu, 1994). The most actively studied constituent, has been effective in reducing nerve pain, painful menstruation, abdominal pain and headache. the mechanism of action appears to involve opioid, GABA-ergic, dopaminergic and cannabanoid receptors. Interestingly, corydalis has been shown to improve healing and clinical symptoms associated with stomach and intestinal ulcers in people.

***Boswellia***

A 2008 Cochrane review found 7 controlled trials examining the efficacy of boswellia as an anti-inflammatory agent in such varied human conditions as asthma, rheumatoid arthritis, Crohn's disease, colitis, and osteoarthritis. All trials showed clinical benefit. A prospective, open, multicenter clinical trial in dogs with osteoarthritis utilized a standardized boswellia resin extract. Overall, 71% of the dogs that were assessed exhibited "good" or "very good" results at 2 and 6 weeks of treatment. Investigators claimed that after 6 weeks, anywhere from 40% to 70% of the dogs were symptom-free.

***Bromelain***

Bromelain is a complex of proteolytic enzymes, glycoproteins, and proteinase inhibitors extracted from pineapple. It has been shown (in a formula with another proteolytic enzyme) to have anti-inflammatory activity clinically equivalent to that of the NSAID, diclofenac. Enzyme therapy is thought to have multiple activities that benefit patients with chronic inflammatory disease: they may inhibit release of inflammatory mediators, modulate adhesion molecules, and activate fibrinolysis. Some of its pharmacologic properties may be mediated through nonprotein factors, as well. Although most clinical trials concentrate on mitigation of arthritis pain, bromelain has been used for treatment of other inflammatory diseases as well.

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