



AMERICAN
BOTANICAL
COUNCIL

Post Office Box 144345
Austin, Texas 78714-4345
Phone 512/926-4900
Fax 512/926-2345
Email: abc@herbalgram.org
www.herbalgram.org

Mark Blumenthal
Editor

Wayne Silverman, PhD
Underwriting Coordinator

Betsy Levy
Densie Webb, PhD
Leela Devi, MSN, RN
Summary Writers

Karen Newton
Database Manager

Susan McFarland
Ginger Webb
Co-coordinators

Dawnelle Malone
Research Assistant

The American Botanical Council provides this summary and the enclosed article as an educational service. By providing this article, ABC does not warrant that the data is accurate and correct, nor does distribution of the enclosed article constitute any endorsement of the information contained or of the views of the authors.

ABC does not authorize the copying or use of the original articles. Reproduction of the summaries is allowed on a limited basis for students, colleagues, employees and/or customers. Other uses and distribution

HERBCLIP

FILE: · Nettles (*Urtica dioica*)
· Antiinflammatory Action
· Rheumatoid Arthritis

DATE: April 8, 1998

HC 022382

RE: **Nettle Leaves Show Antiinflammatory Effect
Against Arthritis in Clinical Study**

Chrubasik, S., W. Enderlein, R. Bauer, and W. Grabner. Evidence for Antirheumatic Effectiveness of Herba *Urticae dioicae* in acute arthritis: A Pilot Study. *Phytomedicine*, Vol. 4 (2), 1997, pp. 105-108.

Urtica dioica, or stinging nettles, contains several anti-inflammatory compounds, such as cyclooxygenase and lipoxygenase inhibitors and substances that affect the secretion of cytokines. Cytokines are released by cells in trouble to signal other cells to mount their defenses against an invader. Cytokine-mediated processes include: cartilage degradation, bone resorption, metalloprotease synthesis, endothelial cell adhesion, and monocyte differentiation evident in acute rheumatic arthritis. In this article, researchers evaluated the use of stinging nettles in the treatment of acute arthritis.

Previous research had established that 1340 mg of powdered extract of nettle leaves (*Urtica dioica*) allows a 50 percent reduction in the dose of nonsteroidal anti-inflammatory analgesics (NSAID) used to treat arthritis. In a German study, 40 subjects participated in an open randomized study comparing the effectiveness of a combination of stewed stinging nettles and 50 mg of diclofenac to the standard 200 mg dosage of diclofenac. Diclofenac is an NSAID commonly prescribed in dosages of 150 to 200 mg per day for the treatment of rheumatoid and osteoarthritis. The subjects were randomly assigned to the nettle and 50 mg of diclofenac group (group D50+U) or the 200 mg diclofenac group (group D200). Extensive prescreening eliminated patients with diseases, conditions, medications, or allergies that could influence the outcome of the study.

Group D200 received a semisynthetic gastric protective prostaglandin analogue misoprostol in addition to the diclofenac. Gastric bleeding is a common side effect of NSAID use. Both groups received the same nutrition over the study period of 14 days. The primary measure of effectiveness was the improvement (decrease) in serum concentrations of C-reactive protein (CRP). Other criteria were total joint scores for physical impairment, subjective pain, pain on pressure, and stiffness. CRP and total joint scores

improved dramatically (70 percent median score change) in both treatment groups. The treatment was well tolerated over the two week period, with only six participants (3 from D200 and 3 from D50+U) reporting side effects. The D200 group reported minor side effects of diarrhea and abdominal pain during the treatment period. The D50+U group reported the side effect of meteorism [abnormal distention due to the presence of gas or air in the intestine or the peritoneal cavity], intestinal gas with bloating.

This study indicates that 50 mg of stewed *Urtica dioica* plus 50 mg of diclofenac is as effective as 200 mg of diclofenac at reducing the clinical symptoms of acute arthritis. This could be great news for those who cannot tolerate NSAIDs because of ulcers or other gastric problems. Further study is needed to determine if stinging nettle could be effective without the use of NSAIDs. —*Leela Devi, MSN, RN*

Bin #132