## ORIGINAL RESEARCH

## A Complex of Three Natural Anti-inflammatory Agents Provides Relief of Osteoarthritis Pain

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## **ABSTRACT**

Background • Devil's claw (*Harpagophytum procumbens*), turmeric (*Curcuma longa*), and bromelain are nutraceuticals that have demonstrated anti-inflammatory and analgesic properties and may be potential solutions in the treatment of acute or chronic joint pain. Their analgesic effect, however, is generally considered mild to moderate, and the relevance of their clinical use remains subject to discussion. **Objectives** • The aim of the study was to evaluate the clinical relevance of the efficacy of a marketed complex of 3 plant extracts—*H procumbens*, *C longa*, and bromelain (AINAT, 650 mg)—in the treatment of degenerative joint pain.

**Methods** • A multicenter, observational, prospective, open-label survey was conducted in 8 rheumatology centers. The study included 2 groups, 1 group with participants suffering from chronic osteoarthritis (OA) pain and 1 group suffering from acute OA pain.

**Setting** • The research team carried out the study under daily practice conditions.

**Participants** • A total of 42 patients (36 women; mean age = 67 y) suffering from acute or chronic, degenerative spine or joint pain participated.

**Intervention** • Two 650-mg capsules of AINAT were administered  $3 \times /d$  to patients with acute pain and  $2 \times /d$  to patients with chronic pain.

Outcome Measures • At baseline, and during a follow-up visit at 15 d for the acute pain group and 60 d for the chronic pain group, the research team obtained each participant's global assessment (PGA) and each

rheumatologist's global assessment (RGA), as well as each participant's pain score, using for each of them a 100-mm visual analogue scale (VAS). The clinical relevance of the efficacy was evaluated by comparing the outcome measures at endpoint to the values defining the patient acceptable symptom state (PASS) and by comparing the variations (in mm and %) between baseline and endpoint to those defining the minimal clinically important improvement (MCII). Tolerance was also assessed by collecting adverse events at each visit and by using a 4-point scale (very good to bad) at the endpoint.

**Results** • At baseline, the VAS pain score (standard deviation) was 69.1 mm (15.4) and 68.0 mm (18.2) for patients with acute and chronic pain, respectively. At the endpoint, the scores decreased to 42.1 mm (21.1) and 37.8 mm (25.9), respectively. This reduction of pain, as a percentage as well as an absolute value, corresponds to the required definition of MCII, particularly in patients with chronic joint pain. At the endpoint, most of the patients in both groups reached the level of pain defined as the PASS. No withdrawals occurred due to treatment side effects.

Conclusion • The improvement of joint pain was clinically relevant in patients treated with AINAT for both acute and chronic OA pain. Considering its excellent tolerance profile, the tested complex of 3 plant extracts with anti-inflammatory properties may be a valuable and safe alternative to NSAIDs in patients suffering from degenerative joint diseases. (Altern Ther Health Med. 2014;20(suppl 1):32-37.)

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