

Leech therapy for symptomatic treatment of knee osteoarthritis: results and implications of a pilot study.

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CONTEXT:

Leech therapy was a mainstay in conventional treatment for pain from antiquity until the mid-19th century. Its use is still widespread in traditional healing procedures in Asia, Africa, and Arabic countries. There is renewed interest in leech therapy in the field of complementary medicine and empirical evidence for specific benefit in knee osteoarthritis.

OBJECTIVES:

To determine the effect of leech therapy as an adjunctive treatment in painful knee osteoarthritis, to investigate the onset of action, to evaluate patients' acceptance of this treatment, and to investigate the side effects of the procedure.

DESIGN:

Observational, controlled, nonrandomized pilot-study.

SETTING:

Subjects were inpatients of an academic teaching hospital of the University of Essen, Department of Internal and Integrative Medicine, Essen, Germany.

PATIENTS:

16 inpatients (mean age 69 +/- 9 years) with a confirmed diagnosis of osteoarthritis of the knee joint; 10 patients were treated with leeches and 6 served as controls.

INTERVENTION:

A single trial of 4 leeches (*Hirudo medicinalis*) applied topically at painful periarticular sites of the knee joint in the experimental group (n = 10). Both groups received conventional treatment for pain with the exclusion of nonsteroidal anti-inflammatory drugs.

MAIN OUTCOME MEASURES:

Self-reported general knee pain, assessed by visual analog scale for 10 days daily and in a follow-up after 28 days. Frequency of adverse effects also was recorded.

RESULTS:

Periarticular application of 4 leeches led to rapid relief of pain with sustained improvement after 4 weeks in the absence of major complications.

CONCLUSION:

Leech therapy may be an effective treatment for rapid reduction of pain associated with osteoarthritis of the knee. Its efficacy should be tested in larger randomized controlled trials with assessment of expectation bias.

<https://www.ncbi.nlm.nih.gov/pubmed/12233807>

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