

Effectiveness of leech therapy in women with symptomatic arthrosis of the first carpometacarpal joint: a randomized controlled trial.

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Abstract

Leech therapy has been shown to be effective for symptomatic treatment of osteoarthritis of the knee. We aimed to investigate the effectiveness of leech therapy in another type of osteoarthritis, osteoarthritis of the first carpometacarpal joint (thumb saddle joint). **32 women** with symptomatic painful osteoarthritis of the first carpometacarpal joint and who scored >40 mm on a 100mm VAS pain scale were randomized to a **single treatment with 2-3 locally applied leeches (leech group)** or a **30-day course with topical diclofenac twice a day**. Primary outcome measure was change of overall pain (mean of VAS for pain at rest, in motion, during grip) from baseline to day 7. Secondary outcomes were functional disability (DASH-questionnaire), quality of life (QoL, SF-36) and grip strength. Patients were examined baseline and at days 7, 30 and 60 after treatment. Overall pain score at day 7 was reduced from 59.6±13.8 to 27.1±20.6 in the leech group (n=16) and from 50.6±13.3 to 46.9±18.5 with diclofenac (n=16) (group difference -26.5, 95%CI -40.3; -12.7; p=0.0003). **Group differences for pain relief favoring the leech treatment increased at days 30 and 60.** Significant treatment effects were also observed for the DASH score, QoL and grip. Results were not affected by outcome expectation or consumption of analgetics. **A single course of leech therapy is effective in relieving pain, improving disability and QoL for at least 2 months.** The potential of leech therapy for treatment of arthritic pain and underlying mechanisms should be further investigated.

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