# Homeopathic remedies for the treatment of osteoarthritis: a systematic review

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## Authors' objectives

To locate and assess all randomised controlled trials (RCTs) of homeopathy in the treatment of patients with osteoarthritis (OA).

## Searching

The databases searched from their inception to August 2000 included MEDLINE, EMBASE, AMED, BIOSIS Previews and the Cochrane Library. The search terms were: 'osteoarthritis', 'osteoarthrosis', 'degenerative joint disease', 'degenerative arthritis', 'degenerative arthrosis', 'gonarthrosis' and 'coxarthrosis'. The full text terms 'homeop*' and 'homoeop*' and the MeSH terms 'homeopathy' and 'alternative medicine' were also used. Additional published and unpublished material was identified by examining the bibliographies of located studies, reviews and the authors' own files, and by contacting experts and manufacturers in the field. Studies reported in any language were considered.

## Study selection

### Study designs of evaluations included in the review

Only RCTs were included in this review.

### Specific interventions included in the review

All forms and modes of application of homeopathy were eligible for inclusion. Comparative studies of one homeopathic treatment measured against another active drug were included. One intervention compared two 2 mL intra-articular injections per week of Zeel (a combination homeopathic preparation composed of Rhus toxicodendron, Arnica montana, Solanum dulcamara, Sanguinaria canadensis and sulphur) with one 2mL injection per week of Hyalart (a brand of hyaluronic acid) for 5 weeks.

A second intervention compared oral administration of either 10 drops of a homeopathic preparation (Rhus toxicodendron, Causticum and Lac vaccinum) and placebo capsules, or a liquid placebo and paracetamol capsules (2,600 mg paracetamol daily), all taken four times daily for 30 days.

A third intervention compared the oral administration (three times daily) of two 300 mg capsules of fenoprofen or two capsules of placebo with 5 drops of Rhus toxicodendron (6x: 1/1,000,000 dilution) or 5 placebo drops. In this intervention, the treatment regimes consisted of: (1) placebo capsules and placebo drops; (2) fenoprofen capsules and placebo drops; or (3) placebo capsules and Rhus toxicodendron drops. The duration of each treatment regime was 2 weeks.

Finally, the fourth intervention compared topical application (three times daily for 4 weeks) of 1 g 0.5% piroxicam gel with SRL. SRL contains Symphytum officinale (comfrey), Rhus toxicodendron (poison ivy) and Ledum palustre (marsh tea).

### Participants included in the review

OA. Patients of any age with OA were eligible. The joint location of the OA was the knee in three of the included studies, and the hip and knee in the remaining study.

### Outcomes assessed in the review

The authors did not specify any inclusion criteria for the outcome measures. The primary outcome measures were pain under various conditions and joint tenderness. Pain was measured on visual analogue scales (VAS) and 4-point scores, while joint tenderness was measured by the single-joint Ritchie index.

### How were decisions on the relevance of primary studies made?

The authors do not state how the papers were selected for the review, or how many of the reviewers performed the

selection.

## Assessment of study quality

The methodological quality of the studies was assessed using the standard scoring system developed and validated by Jadad et al. (see Other Publications of Related Interest no.1), in terms of random allocation, double-blinding and description of drop-outs and withdrawals. The authors do not state how the papers were assessed for quality, or how many of the reviewers performed the quality assessment.

## Data extraction

The data were extracted by one reviewer into a predefined table and validated by the second author. The following data were extracted: the duration of treatment; documentation of power calculations; the inclusion and exclusion criteria; and assessment of concomitant medications and compliance. Additional data provided in the paper related to the joint location of OA, the sample size, study design, intervention, control, primary outcome measures, and results.

## Methods of synthesis

**How were the studies combined?**

A narrative synthesis was undertaken.

**How were differences between studies investigated?**

Differences between the studies were discussed in the text of the review.

## Results of the review

Four RCTs with a total of 406 patients were included.

Two of the four included trials presented positive evidence for the effectiveness of combination homeopathic preparations in comparison with conventional medications. A third trial concluded that a single orally administered homeopathic remedy, Rhus toxicodendron, was significantly inferior to a conventional medication. A fourth trial showed that a topically applied homeopathic gel was at least as effective as a conventional non-steroidal anti-inflammatory drug gel.

## Authors' conclusions

There appeared to be a positive trend towards the effectiveness of combination homeopathic preparations for the treatment of patients with OA. However, the small number of trials performed to date preclude firm conclusions as to the effectiveness of combination homeopathic remedies for this indication.

## CRD commentary

The review question had defined inclusion and exclusion criteria for the study design, participants and intervention, and all outcome measures were deemed acceptable. The review was based on a thorough search for evidence with attempts to find unpublished material and no language restrictions. The trials were quality assessed using a validated scale. The data were extracted by two reviewers and sufficient detail was presented in the text and tables. The results were synthesised narratively, which was appropriate given the differences between the trials in terms of the treatment regimens.

The authors' conclusions appear to be sound but, as they pointed out, the trials included in their review do not accurately reflect the routine practice of homeopathy. Further research, in the manner outlined in the paper, is warranted.

## Implications of the review for practice and research

Practice: The authors state that it should be noted that none of the reviewed trials fully represent 'classical' homeopathic

practice, where individual remedy selection and the possibility of changing the medicine during the treatment are integral to the treatment regime.

Research: The authors state that the trials performed to date do not accurately reflect the routine practice of homeopathy. Future research should focus on the clinical effectiveness of homeopathy as it is most commonly practised for the treatment of OA, as well as replicate existing studies and further investigate homeopathic complexes. Attention to the quality of diagnosis of OA should be addressed with trials clearly stating diagnostic criteria and the method of assessment. Care should be taken that the outcome measures are valid measures of OA, as defined by the Osteoarthritis Research Society and the World Health Organization (see Other Publications of Related Interest nos.2-3). Investigations into the reduction of allopathic medication, specifically non-steroidal anti-inflammatory drugs, alongside homeopathic treatment could also be conducted.

### Bibliographic details

Long L, Ernst E. Homeopathic remedies for the treatment of osteoarthritis: a systematic review. British Homoeopathic Journal 2001; 90(1): 37-43

### PubMedID

11212088

### Other publications of related interest

1. Jadad AR, Moore RA, Carroll D, Jenkinson C, Reynolds DJ, Gavaghan DJ, et al. Assessing the quality of reports of randomized clinical trials: is blinding necessary? Control Clin Trials 1996;17:1-12. 2. Altman R, Brandt K, Hochberg M, Moskowitz R, Bellamy N, Bloch D, et al. Design and conduct of clinical trials in patients with osteoarthritis: recommendations from a task force of the Osteoarthritis Research Society. Osteoarthritis Cartilage 1996;4:217-43. 3. World Health Organization. Guidelines for the clinical investigations of drugs used in rheumatic diseases. Copenhagen: WHO; March 1995. European drug guidelines, Series 5.

### Indexing Status

Subject indexing assigned by NLM

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### Record Status

This is a critical abstract of a systematic review that meets the criteria for inclusion on DARE. Each critical abstract contains a brief summary of the review methods, results and conclusions followed by a detailed critical assessment on the reliability of the review and the conclusions drawn.