

Balneotherapy for rheumatoid arthritis and osteoarthritis.

Verhagen AP, de Vet HC, de Bie RA, Kessels AG, Boers M, Knipschild PG. Cochrane Database Syst Rev. 2000;(2):CD000518.

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BACKGROUND: Balneotherapy (hydrotherapy or spa therapy) for patients with arthritis is one of the oldest forms of therapy. One of the aims of balneotherapy is to soothe the pain and as a consequence to relieve patients' suffering and make them feel well.

OBJECTIVES: To perform a systematic review to assess the effects of balneotherapy for rheumatoid arthritis and osteoarthritis.

SEARCH STRATEGY: Using the Cochrane search strategy, studies were found by screening: 1) The Medline CD-ROM database from 1966 to June 1999 and 2) the database from the Cochrane Field 'Rehabilitation and Related Therapies', which contains also studies published in journals not covered by Medline. Also, 3) reference checking and 4) personal communications with authors was carried out to retrieve eligible studies. To perform an adequate assessment of the methodological quality the languages of the publications had to be: Dutch, English, French or German. Date of the most recent literature search: June, 1999

SELECTION CRITERIA: Studies were eligible if they were randomized controlled trials (RCT) comparing balneotherapy with any intervention or with no intervention. Patients included had rheumatoid arthritis (RA), osteoarthritis (OA) or some other form of arthritis. Trials incorporating patients with definite or classical rheumatoid arthritis (RA) as defined by the American Rheumatism Association Criteria (ARA) (Ropes 1958) (these criteria have changed over time) or by the criteria of Steinbrocker (1949) were regarded as a separate group. At least one of the WHO/ILAR core set of endpoints for RA clinical trials had to be the main outcome measures.

DATA COLLECTION AND ANALYSIS: A criteria list used to assess the methodological quality was the one developed at the Department of Epidemiology at the Maastricht University, called "the Maastricht list". The quality scores and data abstraction of the studies were carried out independently by two reviewers (HdV, RdB). Disagreements were solved by consensus.

MAIN RESULTS: Ten trials with 607 patients were included in this review. Most trials reported positive findings, but were methodologically flawed to some extent. A 'quality of life' outcome was reported by two trials. Just one of the randomized trials mentioned an intention-to-treat analysis and only three performed a comparison of effects between groups. Pooling of the data was not performed, because of heterogeneity of the studies, multiple outcome measurements, and, apart from two studies, the overall data presentation was too scarce to enable pooling of the data.

REVIEWER'S CONCLUSIONS: One cannot ignore the positive findings reported in most trials. However the scientific evidence is weak because of the poor methodological quality, the absence of an adequate statistical analysis, and the absence, for the patient, of most essential outcome measures (pain, quality of life). Therefore, the noted "positive findings" should be viewed with caution. Because of the methodological flaws an answer about the efficacy of balneotherapy cannot be provided at this time. Flaws found in the reviewed studies could be avoided in future trials.

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