Balneotherapy for arthritis

**Clinical bottom line:** No high quality evidence exists to show whether taking baths helps people with arthritis. The studies were methodologically flawed and of insufficient power. No meaningful information on efficacy was reported.

Balneotherapy (spa therapy) is the act of bathing in thermal or mineral waters at temperatures of about 34 C. The hydrostatic force of the water is thought to bring about pain relief, which may result from taking stress off the affected joint, relaxation or other factors. It is most commonly prescribed for patients with psoriatic or rheumatoid arthritis.

**Systematic review:**

Date review completed: 1995

Number of trials included: 14

Number of patients: (613 total)

Control groups: other spa type therapies with or without mud packs.
Main outcomes: improvement in symptoms of arthritis.

Inclusion criteria were: clinical trial; patients with arthritis; assessed balneotherapy; used at least one WHO or ILAR endpoints for rheumatoid arthritis (e.g. pain). MEDLINE and the Cochrane register on rehabilitation therapy were searched to 1995 using a number of relevant keywords. References lists of retrieved reports were checked and authors were contacted. Only studies printed in English, French, German or Dutch were considered. Study quality was assessed and reports were divided by methodological design. A descriptive analysis was conducted.

Findings:

Fourteen studies of poor quality and validity were included.

Rheumatoid arthritis:

Four randomised clinical trials (RCTs) assessed balneotherapy in 147 patients over three months. One study was double blind, the others were single blind. Three showed improvement in outcomes (e.g. duration of morning stiffness, 15 minute walk time, hand grip strength); one single blind study drew no conclusion. None compared differences between treatment groups. There were three nonrandomised, unblinded studies (135 patients) with one year follow-up in one study and no follow-up in three. All were positive.

Other forms of arthritis:

Three RCTs assessed 91 patients over six or 18 weeks. Two studies were single (observer) blind, the others were not blind. All reported improvement with hydrotherapy with or without exercises. Three nonrandomised, unblinded studies assessed 240 patients; all were positive.

Adverse effects

Adverse effects were not mentioned.
Comment

The reviewers stated that although most studies reported improvement with balneotherapy the number of patients improved in each trial was not mentioned. No useful information about efficacy was reported in these trials. Whether the nineteen studies which were excluded because they did not meet the inclusion criteria for language could provide any useful information is unknown. The studies lacked power (all but one had fewer than 25 patients per treatment group) and the lack of adequate blinding meant that bias was possible. The quality scores for these trials were poor; the randomised trials only scored about half of the maximum score. Improvement was not defined so it is unknown whether that reported constituted clinically relevant improvement.

Further reading

Related topics

Identifier

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