

Postprint Version	1.0
Journal website	http://www.mrw.interscience.wiley.com
Pubmed link	http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&doctype=Abstract&list_uids=14974005&query_hl=53&itool=pubmed_docsum
DOI	10.1002/14651858.CD003114.pub2

The Cochrane Database of Systematic Reviews 2005 Issue 4
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This record should be cited as: Steultjens EEMJ, Bouter LLM, Dekker JJ, Kuyk MMAH, Schaardenburg DD, Van den Ende ECHM. Occupational therapy for rheumatoid arthritis. The Cochrane Database of Systematic

[REVIEW]

Occupational therapy for rheumatoid arthritis

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ABSTRACT

Background For persons with rheumatoid arthritis (RA) the physical, personal, familial, social and vocational consequences are extensive. Occupational therapy (OT), with the aim to facilitate task performance and to decrease the consequences of rheumatoid arthritis for daily life activities, is considered to be a cornerstone in the management of rheumatoid arthritis. Till now the efficacy of occupational therapy for patients with rheumatoid arthritis on functional performance and social participation has not been systematically reviewed.

Objectives To determine whether OT interventions (classified as comprehensive therapy, training of motor function, training of skills, instruction on joint protection and energy conservation, counseling, instruction about assistive devices and provision of splints) for rheumatoid arthritis patients improve outcome on functional ability, social participation and/or health related quality of life.

Search strategy Relevant full length articles were identified by electronic searches in Medline, Cinahl, Embase, Amed, Scisearch and the Cochrane Musculoskeletal group Specialised Register. The reference list of identified studies and reviews were examined for additional references. Date of last search: December 2002.

Selection criteria Controlled (randomized and non-randomized) and other than controlled studies (OD) addressing OT for RA patients were eligible for inclusion.

Data collection and analysis The methodological quality of the included trials was independently assessed by two reviewers. Disagreements were resolved by discussion. A list proposed by Van Tulder et al. (Van Tulder 1997) was used to assess the methodological quality. For outcome measures, standardized mean differences were calculated. The results were analysed using a best evidence synthesis based on type of design, methodological quality and the significant findings of outcome and/or process measures.

Main results Thirty-eight out of 58 identified occupational therapy studies fulfilled all inclusion criteria. Six controlled studies had a high methodological quality. Given the methodological constraints of uncontrolled studies, nine of these studies were judged to be of sufficient methodological quality. The results of the best evidence synthesis shows that there is strong evidence for the efficacy of "instruction on joint protection" (an absolute benefit of 17.5 to 22.5,

relative benefit of 100%) and that limited evidence exists for comprehensive occupational therapy in improving functional ability (an absolute benefit of 8.7, relative benefit of 20%). Indicative findings for evidence that "provision of splints" decreases pain are found (absolute benefit of 1.0, relative benefit of 19%).

Authors' conclusions There is evidence that occupational therapy has a positive effect on functional ability in patients with rheumatoid arthritis.

SYNOPSIS

Does occupational therapy help people with rheumatoid arthritis?

To answer this question, scientists analysed 38 studies. The studies tested over 1700 people who had rheumatoid arthritis. People were either counseled, trained in skills or trained to move or do daily chores with less pain, taught to protect their joints, given splints, taught to use assistive devices, or had no therapy. Not all studies were high quality but this Cochrane Review provides the best evidence about occupational therapy that we have today.

What is occupational therapy and how could it help rheumatoid arthritis?

Rheumatoid arthritis is a disease in which the body's immune system attacks its own healthy tissues. The attack happens mostly in the joints of the feet and hands and causes redness, pain, swelling and heat around the joint. People with rheumatoid arthritis can find it difficult to do daily chores such as dressing, cooking, cleaning and working. Occupational therapists can give advice on how to do every day activities with less pain or advice on how to use splints and assistive devices.

How well does it work?

A high quality study showed that people could do daily chores better after having occupational therapy with training, advice and counseling. Two high quality studies showed that people given advice about how to protect their joints could do daily chores better than people with no advice or another type of occupational therapy. But both therapies did not help overall well-being or pain. Another high quality study showed that people trained to move or do daily activities could move just as well as and with the same amount of pain as people who did not have occupational therapy. The strength of their grip was also improved immediately after wearing a splint. But hand movement was less after wearing a splint. There was not enough information to say whether advice about using assistive devices is helpful.

What is the bottom line?

There is "gold" level evidence that occupational therapy can help people with rheumatoid arthritis to do daily chores such as dressing, cooking and cleaning and with less pain. Benefits are seen with occupational therapy that includes training, advice and counseling and also with advice on joint protection. Splints can decrease pain and improve the strength of one's grip, but it may decrease hand movement.