

# Cognitive behavioural therapy plus medical management reduced depression and joint inflammation in rheumatoid arthritis

Sharpe L, Sensky T, Timberlake N, et al. A blind, randomized, controlled trial of cognitive-behavioural intervention for patients with recent onset rheumatoid arthritis: preventing psychological and physical morbidity. *Pain* 2001 Jan;89:275-83.

**QUESTION:** Does the addition of cognitive behavioural therapy (CBT) to medical management relieve symptoms and reduce disability and psychological distress in patients with recent onset rheumatoid arthritis (RA)?

## Design

Randomised [allocation concealed]\*, blinded (outcome assessor), controlled trial with 6 months of follow up.

## Setting

Rheumatology clinics at 3 hospitals in or near London, UK.

## Patients

56 patients who were 18-75 years of age, had had definite or classic RA for <2 years, and tested seropositive for RA. Exclusion criteria were history of mental illness or alcohol or drug abuse, or insufficient fluency in English. Follow up was 80% (mean age 55 y, 71% women, mean duration of illness 12.6 mo).

## Intervention

Patients were allocated to routine medical management and CBT (n=23) or routine medical management alone (n=22). 2 psychologists provided CBT according to a treatment manual during eight 1 hour therapist-client sessions over 8 weeks. The programme included an educational component plus the following self management skills: relaxation training, attention diversion, goal setting, pacing, problem solving, cognitive restructuring, assertiveness and communication, and management of flare ups or high risk situations.

## Main outcome measures

Anxiety and depression (Hospital Anxiety and Depression Scales [HADS]), pain (self reports), disability (Health Assessment Questionnaire [HAQ]), joint inflammation (Ritchie Articular Index), and disease measures (erythrocyte sedimentation rate and C reactive protein concentration).

## Main results

At 6 months, patients in the CBT group were less depressed than at baseline, whereas those in the standard care group became more depressed (mean HADS-depression score change -0.78 v 1.41, p=0.02). More patients in the CBT group than in the standard

care group had improved joint inflammation scores at 6 months (p<0.05) (table). The groups did not differ for anxiety, pain ratings, HAQ ratings of disability, or disease measures.

## Conclusion

The addition of cognitive behavioural therapy to medical management reduced depression and joint inflammation at 6 months in patients with recent onset rheumatoid arthritis.

\*Information provided by the author.

## COMMENTARY

The study by Sharpe *et al* is the latest contribution to a growing body of knowledge that supports the use of broad based CBT in the management of many painful conditions including RA. This study is the first to examine the outcomes of CBT in a sample of people within the crucial first 2 years of diagnosis of RA.

Although the study has many strengths (randomisation, 80% follow up, and blind assessors), one problematic finding was that the standard care group had higher concentrations of C reactive protein (ie, more active disease) than the treatment group at baseline. However, the analyses were adjusted for this baseline difference. The addition of an attention control group and long term follow up at 1 year would add to the importance of the findings.

The results are relevant to nurses who work in outpatient and acute care rheumatology units and rehabilitation settings, and community based nurses who may be in contact with those who have RA. Not all hospitals or health authorities will be able to provide one to one counselling as was done in this study. Although group programmes are available that teach many of the CBT strategies described, the effectiveness of group versus individual programmes is unknown. Materials from the well researched Arthritis Self Management Program (ASMP) were used in this intervention.<sup>1,2</sup> The ASMP is a low cost group programme and is widely available through arthritis societies and foundations in North America and Europe. Nurses could encourage patients with newly diagnosed RA to use such programmes early in their disease course. Nurses could also learn about CBT strategies by volunteering to be a facilitator with the ASMP, or by attending workshops on CBT approaches.

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- 1 Lorig K, Holman H. Arthritis self-management studies: a twelve-year review. *Health Educ Q* 1993;20:17-28.
- 2 Lorig K, Fries JF. *The arthritis helpbook. Tested self-management program for coping with arthritis and fibromyalgia*. 5th edition. Cambridge, MA: Persus Books, 2000.

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Medical management plus cognitive behavioural therapy (CBT) v medical management alone (control) for patients with rheumatoid arthritis†

Outcomes at 6 months	CBT	Control	RRR (95% CI)	NNT (CI)
>25% deterioration in symptoms (RAI score)	4%	27%	84% (10 to 97)	5 (3 to 57)
No change in RAI score	48%	55%	12% (-56 to 51)	Not significant
<b>RBI (CI)</b>				
≥25% improvement in symptoms (RAI score)	48%	18%	163% (6 to 605)	4 (2 to 55)

†RAI=Ritchie Articular Index. Other abbreviations defined in glossary; RRR, RBI, NNT, and CI calculated from data in article.