CBT added to medical management improved clinical outcomes 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.

website extra

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QUESTION: Does the addition of cognitive behavioural therapy (CBT) to medical management improve clinical outcomes in patients with rheumatoid arthritis (RA)?

Design

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

Setting

3 hospital rheumatology clinics 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, 70% women).

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 sessions over 8 weeks, which included an educational component plus 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), joint inflammation (Ritchie Articular Index), and disease measures (erythrocyte sedimentation rate and C reactive protein concentration).

Main results

At follow up, patients in the CBT group were less depressed than at baseline, whereas those in the control group became more depressed (mean HADS depression score change -0.8 v 1.4 , $p=0.02$). More patients in the CBT group than in the control group had improved joint inflammation scores at 6 months ($p<0.05$) (table). The groups did not differ for anxiety, pain ratings, disability ratings, or disease measures.

Conclusion

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

*See glossary.

†Information provided by author.

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

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
RBI (CI)				
≥25% improvement in symptoms (RAI score)	48%	18%	163% (6 to 605)	4 (2 to 55)

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

COMMENTARY

Evidence that psychological interventions can assist the course of certain medical treatments is increasing.¹ Most often, the changes are in psychological dimensions that enhance participation in or response to medical interventions.¹ Differences in research design, and in the type and timing of intervention, limit the clinical applicability of study findings.²

Sharpe *et al* add further support to the finding that CBT can reduce depressive symptoms in people with chronic illness, despite it often worsening in those patients without intervention. These changes persisted at 6 months follow up. The treatment group improved physically compared with the control group. This is an important contribution to the RA literature and to the position that psychological interventions in medicine affect physical functioning and can help treat active disease.

Perhaps the most important contribution is the evaluation of the timing of intervention: earlier interventions can be an effective adjunct to early post diagnostic medical treatment, and may have greater and perhaps more lasting effects than later interventions. The findings support the effectiveness of CBT as an adjunct to medical care early in the course of disease, but the study design does not test whether efficacy is enhanced by the earlier intervention.

The authors note that an alternative hypothesis to the effect of the CBT is that therapist attention, independent of intervention content, contributed to the changes. The authors acknowledge this possibility but noted that the addition of an attention control group was not feasible because of statistical power considerations. They also observed that people in the 15% dropout pool were younger, more impaired, and had more active disease. For that subgroup, it cannot be concluded that the intervention has the same potential for effect.

This well designed study supports the use of CBT early in the disease cycle of patients with RA. Before we regularly adopt such interventions in clinical practice, however, further research comparing earlier with later interventions is necessary, and the efficacy of the intervention needs to be evaluated in younger and more impaired people.

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