

Cognitive behaviour therapy improved functional impairment and fatigue in patients with chronic fatigue syndrome

Deale A, Chalder T, Marks I, et al. *Cognitive behavior therapy for chronic fatigue syndrome: a randomized controlled trial.* *Am J Psychiatry.* 1997 Mar;154:408-14.

Objective

To compare cognitive behaviour therapy (CBT) with relaxation techniques for patients with chronic fatigue syndrome (CFS).

Design

Randomised controlled trial with 6 month follow up.

Setting

A hospital clinic in London, England.

Patients

60 patients (mean age 35 y, 68% women) with CFS. Patients taking antidepressants or anxiolytics were included if the dose was stable for 3 months before and during the trial; 53 patients (88%) completed the study. Exclusion criteria were somatisation disorder, severe depression, ongoing physical investigations, concurrent new treatment, or inability to attend all sessions.

Intervention

Patients were allocated to CBT (n = 30) or relaxation (n = 30) for 13 sessions during a 4 to 6 month period. CBT involved therapy engagement; rationale giving; problem assessment and information gathering; and diary keeping of activity, rest, and fatigue (sessions 1 to 3). At session 4, a schedule of graded activity and planned rest was designed. Activity was gradually increased, rest was reduced, and a sleep routine was developed. Cognitive strategies were introduced at session 8. Patients recorded unhelpful or distressing thoughts and practised generating alternatives. Strategies for dealing with setbacks were rehearsed in the final sessions, and maintenance was reinforced. The first 3 sessions of relaxation were similar to those of CBT. In the next 10 sessions progressive muscle relaxation, visualisation, and rapid relaxation were learned and practised twice daily.

Main outcome measures

Functional impairment, fatigue, mood, and global improvement.

Main results

At 6 months, more patients who received CBT than patients who received relaxation improved ($p < 0.001$), had less fatigue ($p < 0.001$), and no longer met CFS criteria ($p < 0.001$) (table). Self rated global improvement was better for the CBT group than for the relaxation subgroup ($p < 0.01$). Measures of mood did not differ between groups.

Conclusion

Cognitive behaviour therapy improved functional impairment and fatigue in patients with chronic fatigue syndrome.

Cognitive behaviour therapy (CBT) v relaxation*

Outcomes at 6 months	CBT EER	Relaxation CER	RBI (95% CI)	ABI EER-CER	NNT (CI)
Functional improvement	70%	19%	266% (74 to 751)	51%	2 (1 to 4)
Less fatigue	63%	15%	309% (74 to 960)	48%	3 (1 to 5)
Fails the chronic fatigue syndrome	56%	8%	622% (116 to 2585)	48%	3 (1 to 4)

*Abbreviations defined in glossary; RBI, ABI, NNT, and CI calculated from data in article.

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Commentary

CFS is still controversial because little agreement exists about its causes. However, as Deale *et al* point out, this should not prevent the development of effective treatment. Paradoxically, although CFS may present with physical symptoms, it seems to be becoming clear that a psychological intervention (ie, CBT) is an effective treatment. This is the second major treatment trial of this intervention from England.¹ Both studies showed that CBT results in significant improvement in about two thirds of patients after 6 months.

The previous study used normal medi-

cal treatment as a comparison, whereas the study by Deale *et al* used relaxation therapy to control for therapist variables, such as the therapist's time and attention given to patients. Apparently, there is something specific about CBT that patients with CFS find helpful.

Hospital outpatient clinics where persons with CFS are treated should have CBT as part of the treatment regimen that they offer to patients. It is still not clear whether this treatment is useful in primary care settings or whether both cognitive and behavioural components are necessary. The role of antidepressants is

also unclear. Additionally, the treatment is time consuming, and about one third of patients do not improve. This group may benefit from more intensive psychotherapy. CBT may also be helpful in patients who present with other "physical symptoms without disease," such as fibromyalgia.

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1 Sharpe M, Hawton K, Simkin S, et al. Cognitive behaviour therapy for the chronic fatigue syndrome: a randomised controlled trial. *BMJ* 1996;312:22-6.