website extra
Additional information
appears on the
Evidence-Based
Medicine website
www.evidence-based-medicine.com

Self management with the Angina Plan reduced anxiety, depression, angina attacks, and use of medication

Lewin RJ, Furze G, Robinson J, et al. A randomized controlled trial of a self-management plan for patients with newly diagnosed angina. *Br J Gen Pract* 2002;52:194–201.

QUESTION: In patients with newly diagnosed angina, does self management using the Angina Plan introduced by a practice nurse improve psychological outcomes more than an educational programme delivered by a nurse?

Source of funding:
Pfizer.

For correspondence:
Professor R Lewin,
University of York, York,
UK.
RJPL1@york.ac.uk

The Angina Plan (AP) v educational sessions for newly diagnosed angina at 6 months‡

Outcomes	Mean change in score from baseline		
	Angina Plan	Educational sessions	p Value
HAD Scale anxiety	–1.03	0.00	0.052
HAD Scale depression	–0.48	0.41	0.013
Angina attacks per week	–2.98	–0.41	0.016
Number of GTN per week	–4.19	0.59	0.018
SAQ physical limitation	8.42	–1.43	<0.001

‡GTN = glyceryl trinitrate (pills or puffs); HAD = Hospital Anxiety and Depression (0–21 [severe]); SAQ = Seattle Angina Questionnaire (1–100 [better functioning]). All mean score changes favour the Angina Plan and are adjusted for covariates.

COMMENTARY

Angina affects 7.7% of the population over the age of 65.¹ Advances in secondary prevention of coronary heart disease with drug treatment and increasing use of coronary revascularisation have overshadowed other methods of managing angina patients. Anxiety, depression, and reduced quality of life are associated with angina and predict outcome independently of coronary angiographic findings. Moreover, the disability from angina is not a simple function of the degree of myocardial ischaemia: patients with relatively mild ischaemia can be severely disabled by their symptoms.² Pharmacological and surgical methods do not address these problems. Cognitive behavioural techniques have been used successfully to manage symptoms from a wide range of chronic conditions.³ Previous studies have shown that these techniques, applied in the context of a home based self help rehabilitation programme after a coronary event, can improve psychological morbidity and reduce health service use.⁴

The study by Lewin *et al* targets patients recently diagnosed with angina in primary care. A relatively short consultation with a specially trained nurse, provision of written material, and a relaxation tape followed by periodic telephone follow up, is a feasible intervention for internal medicine, family, or general practices. This study is small and probably underpowered, the change in mental health outcomes was modest, patients were followed up for only 6 months, and 1 nurse carried out all the interventions. Because of these limitations, it is premature to recommend routine implementation of the intervention. Yet the positive change in many of the outcome measures is an impetus for further research on brief interventions with a cognitive behavioural framework. This study reminds us again of the importance of addressing patients' educational and emotional needs in managing angina and other chronic conditions.

Gene Feder, MD, FRCGP

Barts and the London, Queen Mary's School of Medicine and Dentistry, London, UK

- 1 Ford ES, Giles WH, Croft JB. Prevalence of nonfatal coronary heart disease among American adults. *Am Heart J* 2000;139:371–7.
- 2 Sullivan MD, LaCroix AZ, Russo JE, *et al*. Depression and self-reported physical health in patients with coronary disease: mediating and moderating factors. *Psychosom Med* 2001;63:248–56.
- 3 Enright SJ. Cognitive behaviour therapy—clinical applications. *BMJ* 1997;314:1811–6.
- 4 Lewin B, Robertson IH, Cay EL, *et al*. Effects of self-help post-myocardial-infarction rehabilitation on psychological adjustment and use of health services. *Lancet* 1992;339:1036–40.

Patients

142 patients (mean age 67 y, 60% men) who had been diagnosed with angina in the previous 12 months. Exclusion criteria were angina for >12 months, a life threatening illness, dementia, or mental confusion. Follow up was 91%.

Intervention

Patients were allocated to a self help manual (the Angina Plan) (n=68) or educational sessions with additional booklets (n=74). The Angina Plan consisted of a 70 page, patient held workbook and a 20 minute audio-taped relaxation programme, which were given to the patient and, when possible, partner during a 30–40 minute structured interview by a nurse. Nurses were also instructed to identify any of the patient's misconceptions about angina and to correct these with accurate information. Educational sessions consisted of the identification of risk factors for coronary heart disease by a nurse, a discussion about how to reduce them, and an information package.

Main outcome measures

Anxiety and depression (Hospital Anxiety and Depression Scale, 0–21 [severe] points). Secondary outcomes included number, severity, and duration of angina episodes (angina diary); number of short acting glyceryl trinitrate (GTN) pills or puffs of sublingual spray (angina diary); and quality of life (Seattle Angina Questionnaire [SAQ], 1–100 [better functioning] points).

Main results

Analysis was by intention to treat. Patients in the Angina Plan group had greater reductions in anxiety (borderline significance) and depression (p=0.013), fewer angina attacks weekly (p=0.016), less use of GTN (p=0.018), and greater improvement on the physical limitation component of the SAQ (p<0.001) than patients in the educational session group (table). Treatment groups did not differ for the SAQ components of anginal stability, angina frequency, treatment satisfaction, or disease perception, or for severity or duration of angina attacks.

Conclusion

In patients with newly diagnosed angina, self management with the Angina Plan reduced anxiety and depression, the frequency of angina attacks, and the use of medication.

*See glossary.

†Information provided by author.