

ABSTRACTS

CARDIAC REHABILITATION WORKS, BUT IS POORLY ATTENDED

Cardiac rehabilitation is the normal treatment after major cardiac events such as acute myocardial infarction, coronary artery bypass grafting (CABG) and other surgical interventions. There is general agreement that this is beneficial, but one study in Australia suggests that these programmes are under-attended.

The authors set out to describe the patterns of use of cardiac rehabilitation in Victoria and to assess whether the survival benefits predicted in clinical trials are actually realised in the community. Cardiovascular disease is the leading cause of death in Australia, accounting for more than 40% of deaths overall. Cardiac rehabilitation programmes are designed to help patients achieve lifestyle changes that will modify their cardiac risk factors, using a combination of exercise, education, counselling and support. Most studies have shown that patients attending cardiac rehabilitation after myocardial infarction have a 25% decrease in all-cause mortality. But do patients attend rehabilitation programmes? A cross-sectional study in the USA found an 11% attendance at rehabilitation after myocardial infarction compared with 23% attendance after bypass surgery. Women and people over the age of 65 were poor attendees.

The authors looked at all patients admitted for acute myocardial infarction, CABG or percutaneous transluminal coronary angioplasty (PTCA) in Victoria in 1998. The main outcome measures were rates of attendance at rehabilitation, based on factors such as diagnosis, age, sex and comorbidity. The 5-year survival for attendees was compared with that for non-attendees.

They found that 15% of patients admitted for acute myocardial infarction, 37% for CABG and 14% for PTCA attended rehabilitation programmes. They also found that attendance rates dropped sharply after 70 years of age. However, those who attended had a 35% improvement in 5-year survival. The authors concluded that not enough people attend rehabilitation programmes, even though there are obvious benefits from doing so. It appears that the elderly, women and those with comorbid conditions may particularly benefit from increased rates of attendance.

Sundararajan V, *et al.* *MJA* 2004; **180**: 268-271.

DECLINING ASTHMA PREVALENCE

The prevalence of diagnosed asthma has increased worldwide over the past 50 years. The prevalence of the disease appears to have risen steadily by 1.4% per year in Australia, the most recent survey being in 1997. Generally these were, however, self-reported cases. The International Study of Asthma and Allergy in Childhood (ISAAC) developed a standardised method for describing the prevalence of asthma and other atopic diseases to allow comparison between centres and to monitor changes over time. The first ISAAC study in Australia in 1993 showed that the prevalence of asthma was uniform across the continent. The authors' aim was to determine the change in prevalence of asthma and other atopic disorders in Melbourne schoolchildren between 1993 and 2002, and also to describe changes in the management of asthma over that period.

The subjects were all children between the ages of 6 and 7 years attending a random sample of 84 schools in 1993 and 63 schools in 2002. The main outcome measures were patient-reported symptoms of atopic disease, treatment for asthma and country of birth.

Self-reported wheeze fell from 27.2% in 1993 to 20.0% in 2002, the magnitude of reduction being similar for boys and girls. Reported eczema, however, increased from 11.1% in 1993 to 17.2% in 2002, and rhinitis increased from 9.7% to 12.7%. There were also reductions in the proportion of children attending emergency centres for asthma, the proportion admitted to hospital for asthma and the proportion taking asthma medication. Those who reported frequent wheeze were more likely to be using inhaled steroids.

The authors concluded that there has been a significant reduction in the prevalence of reported asthma in Melbourne schoolchildren, although the prevalence of other atopic diseases has continued to increase.

Robertson CF, *et al.* *MJA* 2004; **180**: 273-276.

SELF-MANAGEMENT OF FIBROMYALGIA

Fibromyalgia is a relatively common, but not well understood, clinical entity that often defies treatment. An article

in the *Annals of Rheumatic Diseases* offers some pointers for management. The authors set out to evaluate a programme based on self-management, including pool exercises and education.

Using a randomised, controlled trial with a 6-month follow-up, the authors allocated 164 patients to either an immediate 6-week programme or a waiting list control group. The main outcomes were changes in quality of life, functional consequences of fibromyalgia, patient satisfaction and pain. These were evaluated using a combination of clinical examination and patient questionnaires. Sixty-one people in the treatment group and 68 control patients completed the programme, including the 6-month follow-up examinations. There were significant improvements in the quality of life and functional consequences of fibromyalgia in the treatment group compared with controls, as measured both by examination and questionnaires. However, there were no changes in pain.

The authors concluded that this 6-week programme of pool exercises and education can improve the quality of life of patients with fibromyalgia and their satisfaction with treatment. These improvements are sustained for at least 6 months after the programme has been completed.

Cedraschi C, et al. *Ann Rheum Dis* 2004; **63**: 290-296.

STATINS AND STROKES

The Heart Protection Study Collaborative Group has found that statin therapy rapidly reduces the incidence not only of coronary events but also of ischaemic strokes, even among those who do not have raised cholesterol levels. This interesting result was reported in a recent issue of *The Lancet*.

The authors point out that lower blood cholesterol concentrations have consistently been found to be strongly associated with lower risks of coronary artery disease, but not with lower risks of strokes. In spite of this, previous randomised trials had found that cholesterol-lowering statin therapy reduces the risk of stroke, but a large-scale prospective confirmation was needed.

The Heart Protection Study Collaborative Group examined the effects of cholesterol-lowering with simvastatin on stroke and other major vascular events in 20 536 people with cerebrovascular disease or other high-risk conditions. Patients were randomly allocated 40 mg simvastatin daily or matching placebo.

The collaborators found that overall there was a highly significant 25% proportional reduction in stroke as a first event in the group taking simvastatin. This reflected a definite 28% reduction in presumed ischaemic strokes, but no apparent difference in strokes due to haemorrhage. Simvastatin also appeared to reduce the number of people having transient ischaemic attacks alone, or requiring carotid endarterectomy or angioplasty. The reduction in stroke was not significant during the first year, but was by the end of the second year of treatment. Among patients with pre-existing cerebrovascular disease there was no apparent reduction in the rate of stroke, but there was a highly significant 20% reduction in the rate of any major vascular event.

The conclusion was that 40 mg simvastatin daily reduced the rate of ischaemic stroke by about one-quarter, and after making allowance for non-compliance in the trial, probably reduced the rate of stroke by about one-third. The study also provides definitive evidence that statin therapy is beneficial for people with pre-existing cerebrovascular disease, even if they do not already show signs of coronary disease.

Heart Protection Study Collaborative Group. *Lancet* 2004; **363**: 757-767.

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