Clinical reviews

Our panel of GPs review recent research papers in their specialist areas that may influence the way you practise

Reviewers

Addiction
Dr Jez Thompson
MB ChB MSc MRCGP
GPwSI substance misuse, Leeds, UK

Cardiovascular disease
Dr Peter Savill
BSc (Hons) MBBS PGDipCard
Former GP, Community Cardiology Specialist, Southampton and Mid Hampshire, UK

Diabetes
Dr Matthew Lockyer
MB BS DCH DRCOG DFFP MRCGP
GP with an interest in diabetes, Suffolk, UK

Mental health
Dr Phillip Bland
BA BM BCh MRCGP DRCOG
Former GP with an interest in mental health, Dalton-in-Furness, UK

Obstetrics and gynaecology
Dr Chris Barclay
MB ChB FRCOG
GP with an interest in O&G, Suffolk, UK

Paediatrics
Dr Chris Barclay
MB ChB FRCOG
GP with an interest in paediatrics, Suffolk, UK

Respiratory disease
Dr Peter Saul
MB ChB DCH DRCOG FRCGP
GP with an interest in respiratory disease, Wrexham, Associate GP Dean N. Wales, Visiting Professor Glyndwr University, UK

Sexual health
Dr Richard Ma
MRCGP DFSRH DCH DRCOG DipGUM DrPH
GP with an interest in sexual health and NIHR Research Fellow, Imperial College, London, UK

Smoking cessation
Dr Jez Thompson
MB ChB MSc MRCGP
GPwSI substance misuse, Leeds, UK

Cardiovascular disease

Exercise improves function and mortality rates in older patients following ACS

A largely home-based exercise intervention improved grip strength, mobility, daily activities and quality of life in older patients after acute coronary syndrome (ACS), an Italian study has shown. Hospitalisation and death rates were also reduced by the intervention.

A total of 235 patients, median age 76 years, range 73-81 years, were recruited to the trial conducted at three sites in Italy. They were randomised one month after their ACS event to the exercise or control group. All had reduced physical performance defined by the short physical performance battery (SPPB) with scores of 4-9.

The exercise intervention included four supervised sessions (one, two, three and four months after discharge) and home-based exercises. The control group attended a health education programme only. The outcomes were the six- and 12-month effects on physical performance, daily activities, anxiety/depression and quality of life. The occurrence of adverse events after 12 months was also recorded.

Average SPPB score rose from 7 to 9 at 6 and 12 months in the exercise intervention group but remained unchanged at 7 in the control group.

The exercise intervention improved six- and 12-month grip strength compared with controls: 29.7 ± 7 kg vs 25 ± 8 kg and 32 ± 10 vs 26 ± 10 kg; $P < 0.001$ respectively.

Gait speed also improved in the exercise group compared with controls: 0.81 ± 0.3 vs 0.63 ± 0.3 m/s at 6 months and 0.85 ± 0.5 vs 0.65 ± 0.5 m/s at 12 months; $P = 0.003$.

Patients in the exercise group had significantly better quality of life scores compared with controls (as measured by the EuroQol-visual analogue scale) at six and 12 months: 80 (70-90) vs 70 (50-80) points and 75 (70-87) vs 65 (50-80) points respectively; $P < 0.001$.

Self-reported ability to walk half a mile was significantly higher in the exercise group than the control group (85% vs 55%; $P < 0.001$).

There was also a significantly reduced perception of anxiety and/or depression in the exercise group compared with controls at six months 21% vs 41%; $P = 0.001$, and at 12 months, 26% vs 48%; $P = 0.03$.

Rates of cardiac death and hospitalisation for cardiac causes were lower in the exercise group compared with controls (7.5% vs 17%; $P = 0.04$).

Cardiac rehabilitation is an established and beneficial intervention following ACS. The average age of patients admitted to hospital for ACS has significantly increased and older patients are often less mobile and less physically active which negatively impacts on their prognosis. However, older patients with ACS are less likely to be referred to, or participate in, traditional centre-based cardiac rehabilitation programmes.

The authors conclude that the early introduction of a tailored, low-cost exercise intervention which was largely home based improved mobility, daily activities, quality of life and outcomes in older patients with ACS.

The investigators state: 'The proposed exercise intervention was feasible, associated with high attendance rates and effective in improving time engaged in physical activity. This was associated with significant improvement in the SPPB values at six and 12 months.

They add: 'This largely home-based exercise intervention reduced anxiety and depression and improved quality of life. The benefits were maintained over time and up to the first year of follow-up.'

These are important findings that show that exercise can continue to provide significant benefits even in the eighth decade of life. This was a relatively small study and larger studies would be helpful in confirming the observed clinical benefit.

DR PETER SAVILL

Campo G, Tonet E, Chiaranda G et al. Exercise intervention improves quality of life in older adults after myocardial infarction: randomised clinical trial. *Heart* Epub ahead of print: 06 March 2020. doi: 10.1136/heartjnl-2019-316349 »