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IN BRIEF

DIABETES

CABG better than PCI in patients with diabetes mellitus

Patients with diabetes mellitus and multivessel coronary artery disease who undergo coronary-artery bypass grafting (CABG) have significantly lower rates of myocardial infarction and death than patients who undergo percutaneous coronary intervention (PCI) with drug-eluting stents, report the FREEDOM trial investigators. The trial involved 1,900 male and female patients aged 63.1 years on average who were recruited in 2005–2010 at 140 international centres. Patients were randomly assigned to undergo CABG or PCI and were followed up for at least 2 years, with a 4-year median follow-up period among survivors. Although stroke occurred more frequently in the CABG group than in the PCI group (5-year rates 5.2% versus 2.4%), the composite primary outcome of death from any cause, nonfatal myocardial infarction or nonfatal stroke was significantly less frequent in the CABG group than in the PCI group (5-year rates 18.7% versus 26.6%).

Original article Farkouh, M. E. *et al.* Strategies for multivessel revascularization in patients with diabetes. *N. Engl. J. Med.* doi:10.1056/NEJMoa1211585

THERAPY

Efficacy and safety of lomitapide in homozygous familial hypercholesterolaemia

Lomitapide, a microsomal triglyceride transfer protein inhibitor, substantially reduced LDL cholesterol levels among patients with homozygous familial hypercholesterolaemia enrolled in the single-arm, open-label Phase 3 HoFH Lomitapide Study. The patient group consisted in 29 individuals aged ≥ 18 years who had homozygous familial hypercholesterolaemia and were registered at 11 centres in four countries. Patients received 5–60 mg of lomitapide per day (median dose 40 mg) during 26 weeks and were followed up to week 78 to assess treatment safety; 23 patients completed the study. Lomitapide treatment was associated with 50%, 44% and 38% reductions in LDL cholesterol levels at weeks 26, 56 and 78, respectively. Lomitapide was not associated with severe adverse effects not resolved by dose adjustment or drug discontinuation, although adverse gastrointestinal effects were common.

Original article Cuchel, M. *et al.* Efficacy and safety of a microsomal triglyceride transfer protein inhibitor in patients with homozygous familial hypercholesterolaemia: a single-arm, open-label, phase 3 study. *Lancet* doi:10.1016/S0140-6736(12)61731-0

BONE

Zoledronic acid lowers fracture risk in men with osteoporosis

Zoledronic acid therapy reduced the risk of morphometric vertebral fractures among men with osteoporosis in a multicentre, double-blind, placebo-controlled trial. Patients with primary or hypogonadism-associated osteoporosis ($n = 1,199$) were randomly assigned to receive one infusion of 5 mg of zoledronic acid at baseline and another 12 months later. At 24 months from the start of the trial, patients who received zoledronic acid had a 1.6% rate of new morphometric vertebral fractures, whereas this rate was 4.9% in the placebo group (relative risk reduction of 67% for zoledronic acid). The incidences of death and serious adverse events did not differ significantly between the groups.

Original article Boonen, S. *et al.* Fracture risk and zoledronic acid therapy in men with osteoporosis. *N. Engl. J. Med.* 367, 1714–1723 (2012)