LDLR mutations if they present with high total cholesterol or apolipoprotein B levels.

Original article Civeira F *et al.* (2008) Frequency of low-density lipoprotein receptor gene mutations in patients with a clinical diagnosis of familial combined hyperlipidemia in a clinical setting. *J Am Coll Cardiol* **52:** 1546–1553

Decline in ankle–brachial index is associated with increased risk of cardiovascular events

Researchers in California, USA have demonstrated that a decrease in ankle–brachial index (ABI) over time, an indicator of peripheral arterial disease progression, is predictive of cardiovascular risk.

In this study, 508 asymptomatic individuals who had undergone initial lower extremity arterial testing between 1980 and 1989 at two medical centers in San Diego, CA, were retested during 1990–1994. Overall, 16.7% of patients had a decrease in ABI of more than 0.15 between the two visits, which—when compared with a decrease of <0.15—was significantly and independently associated with all-cause mortality (risk ratio [RR] 2.4; $P=0.01$) and with cardiovascular disease mortality (RR 2.8; $P<0.01$) at 3 years after the second visit. Very low (<0.7) and low (0.7–0.9) ABIs at the second visit were also significantly associated with increased risk of death, and cardiovascular disease morbidity and mortality at 3 and 6 years after enrollment. Eight individuals who had a high ABI (≥1.4) at the second visit were also identified as being at increased risk for 3-year cardiovascular disease mortality (RR 8.6; $P=0.03$) and for combined CVD morbidity and mortality at 6 years (RR 2.5; $P<0.05$). The authors suggest that close monitoring of ABI in patients with suspected peripheral arterial disease could identify individuals who would benefit from intervention to prevent adverse cardiovascular events.

Original article Criqui MH *et al.* (2008) Progression of peripheral arterial disease predicts cardiovascular disease morbidity and mortality. *J Am Coll Cardiol* **52:** 1736–1742

Older patients represent a distinct clinical subgroup in infective endocarditis

Individuals aged 65 years and older with infective endocarditis are at much greater risk of morbidity and mortality than younger people with the same condition. Durante-Mangoni *et al*. conducted a prospective, multicenter study to determine the clinical characteristics and prognosis of elderly patients with infective endocarditis.

A total of 2,759 participants were enrolled, 1,056 of whom were aged 65 years or older. Patients who contracted infective endocarditis through drug use and those with prosthetic intracardiac devices were excluded. In both older and younger patients, *Staphylococcus aureus* was the most common causative organism. Methicillin resistance was observed more often among older patients. Elderly patients were less likely than younger individuals to present with clinical signs of infective endocarditis, such as conjunctival hemorrhage, embolic events, and splenomegaly ($P<0.001$). Chronic illnesses, such as cancer and diabetes mellitus, were more common among the older patients ($P<0.001$). Individuals aged 65 years or older were more likely to have nonrheumatic aortic stenosis and mitral regurgitation ($P<0.001$ for both). Overall, dysfunction of the mitral valve was characteristic of elderly patients, whereas younger individuals were more likely to present with conditions of the aortic and tricuspid valves. In-hospital mortality among older patients was 24.9%, which was almost twice as high as in the younger group. Multivariate analysis revealed that age 65 years and older was strongly associated with fewer embolic complications, fewer surgical interventions, and higher in-hospital mortality.

Original article Durante-Mangoni E *et al.* (2008) Current features of infective endocarditis in elderly patients. Results of the International Collaboration on Endocarditis Prospective Cohort Study Group. *Arch Intern Med* **168:** 2095–2103

Vitamin C and E supplements do not reduce the risk of cardiovascular events in men

The use of vitamin supplements is widespread, despite the lack of evidence for their long-term benefit. The Physicians Health Study II was a double-blind, placebo-controlled, randomized trial that aimed to determine whether vitamin E and vitamin C supplementation reduce the risk of cardiovascular events among men aged 50 years and older.

A total of 14,641 male physicians from the US were randomly assigned to receive 400 IU