Unstable angina is not caused by a single vulnerable plaque ▶ Previous studies suggest that there is more than one complex plaque in patients with unstable angina. This is backed up in this study which shows that the inflammation (as measured by neutrophil myeloperoxidase depletion) is present in aortic blood and in the venous drainage of the left coronary artery, irrespective of the site of coronary stenosis. There is a transmural gradient of activation in unstable angina not seen in stable angina or variant angina.


The end of in-stent restenosis? ▶ Restenosis after coronary stenting occurs in 20–30% of cases. The development of stents coated with sirolimus or paclitaxel looks like a promising new approach to inhibit smooth muscle proliferation within stents. The RAVEL trial suggests that restenosis rates are close to zero in the sirolimus coated arm and > 25% in the standard stent arm. The benefits were maintained at one year. The disadvantage is that the coated stents may cost three times as much as ordinary stents.


High dose statins reduce MACE whether or not PTCA is done ▶ A lot was made of the AVERT trial comparing 80 mg atorvastatin versus coronary angioplasty (PTCA) for low risk patients. Clearly lipid lowering reduced event rates more that just PTCA. The LIPS trial answers the obvious question of whether early lipid lowering after PTCA has additional benefits. The average low density lipoprotein cholesterol concentration was 3.4 mmol/l, and follow up was for four years. Major adverse cardiac events (MACE) were reduced from 26.7% in the placebo arm to 21.4% (relative risk [RR] 0.78, 95% CI 0.64 to 0.95; p = 0.01). There were trends to reduction in death, MI, and revascularisation rates. This suggests that early statin treatment should be given in nearly all patients undergoing PTCA.


10% annual rupture rate for AAA >5.5 cm that are left alone ▶ Of 198 veterans whose abdominal aortic aneurysm (AAA) was left alone for medical reasons or refusal to have surgery, 57% had died after an average follow up of 1.5 years. The one year incidence of probable rupture by initial AAA diameter was 9.4% for AAA of 5.5–5.9 cm, 10.2% for AAA of 6.0–6.9 cm (19.1% for the subgroup of 6.5–6.9 cm), and 32.5% for AAA of 7.0 cm or more. Much of the increased risk of rupture associated with initial AAA diameters of 6.5–7.9 cm was related to the likelihood that the AAA diameter would reach 8.0 cm during follow up, after which 25.7% ruptured within six months. Percutaneous insertion of covered stents may provide a non-surgical solution in the future.

**General cardiology**

Biventricular pacing improves symptoms in heart failure ► In a randomised controlled trial of 450 patients, those whose biventricular pacemakers were turned on had subjective (New York Heart Association class, quality of life) improvements in their condition as well as improvements in objective markers. There was an improvement in the distance walked in six minutes (39 m v 10 m, p = 0.005), time on the treadmill during exercise testing (81 s v 19 s, p = 0.001), and ejection fraction (+4.6% v −0.2%, p < 0.001). In addition, fewer patients in the group assigned to biventricular resynchronisation than controls patients required hospitalisation (8% v 15%, p < 0.05). The trial was not powered to detect a mortality advantage for this treatment. There is a risk with the procedure and two patients died as a result of the implantation.

**Reviewers**


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