

pre-discharge, 41.3% of *CYP2C19**2 carriers and 22.5% of noncarriers had an on-clopidogrel residual platelet aggregation (RPA) >14%. Analysis of the relationship between pre-discharge RPA and 1-year clinical outcome showed that an RPA >14% was associated with an adjusted hazard ratio of 3.7 for death or myocardial infarction; for patients who received a drug-eluting stent, the hazard ratio associated with an RPA >14% was 7.8.

The authors conclude that *CYP2C19**2 carriers are more likely to have high on-clopidogrel platelet reactivity, which places them at high risk of adverse outcomes after stent placement. Whether higher doses can improve the effect of clopidogrel in carriers of this polymorphism, or whether alternative antiplatelet therapy (e.g. prasugrel) should be employed, remains unclear. The choice of antiplatelet therapy could, however, be assisted by genetic profiling.

Original article Trenk D *et al.* (2008) Cytochrome P450 2C19 681G>A polymorphism and high on-clopidogrel platelet reactivity associated with adverse 1-year clinical outcome of elective percutaneous coronary intervention with drug-eluting or bare-metal stents. *J Am Coll Cardiol* 51: 1925–1934

Catheter ablation for atrial fibrillation is effective in obese patients

Most patients with atrial fibrillation (AF) are symptom-free after treatment by catheter ablation, yet it is unknown whether obese patients, who are at high risk of developing AF, benefit from this procedure to the same degree as non-obese patients. To investigate this issue, Cha *et al.* have determined the efficacy of catheter ablation in patients with a range of BMIs and have found that catheter ablation can effectively treat AF in obese individuals.

From November 2000 to June 2005, this prospective study enrolled 523 consecutive patients (18% of whom were lean [BMI <25 kg/m²], 44% were overweight [BMI 25.0–29.9 kg/m²] and 38% were obese [BMI ≥30 kg/m²]) who underwent radiofrequency catheter ablation at the Mayo Clinic, Rochester, MN. Of the patients who reached the 24-month follow-up, 74% (45 of 61), 73% (95 of 130) and 69% (72 of 105) of the lean, overweight and obese groups, respectively, were free of AF. There were no significant differences between the

three groups in various ablation outcomes, although a weak trend toward reduced procedural efficacy was observed in the most obese patients.

Even though quality of life as measured by the Medical Outcomes Study 36-Item Short-Form General Health Survey (SF-36) was lower for the obese group than for the nonobese groups at baseline and at 3-month and 12-month follow-up, all three groups experienced a similar magnitude of improvement in SF-36 scores after surgery. In multivariate analysis, duration since diagnosis was the only factor associated with recurrence of the condition; BMI was not associated with poor outcome.

Original article Cha YM *et al.* (2008) Catheter ablation for atrial fibrillation in patients with obesity. *Circulation* 117: 2583–2590

Erectile dysfunction in patients with type 2 diabetes predicts coronary heart disease

The prevalence of erectile dysfunction (ED) is higher in men with diabetes mellitus than in men in the general population, and evidence from cross-sectional and retrospective studies suggest that ED is strongly associated with both vascular disease and increased risk of coronary heart disease (CHD). Ma and colleagues conducted a prospective study to determine whether ED influences the risk of incident CHD in a cohort of Chinese men with type 2 diabetes.

A total of 2,306 men (mean age ~54 years) with no evidence of cardiovascular disease on enrollment were assessed (median follow-up 4 years, interquartile range 1.7–7.1 years). ED was reported in 616 (26.7%) patients, and, compared with the rest of the cohort, these men were older, had a longer duration of diabetes, and had more microvascular complications.

Over the study period, new CHD events occurred in 125 (5.3%) patients, many of whom shared the same risk factors as those who had ED. Twice as many men with ED developed CHD than did those without ED (annualized incidence 19.7 vs 9.5 cases per 1,000 person-years, respectively). After adjustment for potentially confounding factors, men with ED had a 1.6-fold higher risk of developing CHD than did those with normal erectile function.