

## Competitive sport is a risk factor for SCD in patients with *LMNA* mutations

Individuals with mutations in the *LMNA* gene usually present with dilated cardiomyopathy, atrioventricular block and/or various types of myopathy, and almost half die suddenly. Pasotti and colleagues have performed a retrospective, longitudinal study to identify risk factors for major cardiovascular events, including sudden cardiac death (SCD), in patients with *LMNA* mutations.

Genotypes of 164 individuals (in 27 families) were analyzed, and 94 had *LMNA* mutations. The median follow-up time was 57 months. Events included in the analysis were death from any cause, death from heart failure, SCD or appropriate implantable cardioverter-defibrillator intervention, and heart transplantation. No events occurred in the 34 patients with *LMNA* mutations who showed no signs of disease; these patients were younger than the symptomatic patients and fewer had a history of competitive sport for 10 years or more. NYHA functional class III–IV and participation in competitive sport for 10 years or more were strong predictors of events in patients with *LMNA* mutations. The hazard ratio for an event was 5.20 ( $P < 0.001$ ) for patients with one of these risk factors, and 26.3 ( $P < 0.001$ ) for patients with both these risk factors, compared with patients with none. Cox bivariable analysis identified splice-site mutations and competitive sport for 10 years or more as predictors of SCD. Compared with patients who had neither of these risk factors, the hazard ratio for SCD was 3.67 ( $P = 0.003$ ) for patients with one of these risk factors and 7.68 ( $P < 0.001$ ) for patients with both.

**Original article** Pasotti M *et al.* (2008) Long-term outcome and risk stratification in dilated cardiomyopathies. *J Am Coll Cardiol* 52: 1250–1260

## Systemic anticoagulation may not be necessary during uncomplicated, elective PCI

A double-blind, randomized trial conducted at the Clinica Montevergine, Mercogliano, Italy, has shown that patients undergoing elective percutaneous coronary intervention (PCI) who received no systemic anticoagulation had

lower rates of major adverse cardiac events and bleeding complications than did patients who received anticoagulation therapy with unfractionated heparin.

The CIAO (Coronary Interventions Antiplatelet-Based Only) study enrolled 700 patients with chronic coronary artery disease who had no evidence of myocardial infarction. All patients were taking aspirin (75–160 mg per day), and received either ticlopidine (250 mg twice daily) or clopidogrel (75 mg per day) for 7 days before PCI, or 300 mg clopidogrel 24 h before the procedure. Participants were randomly assigned to receive 70–100 U/kg unfractionated heparin ( $n = 350$ ) or a matching dose of placebo ( $n = 350$ ) before catheter insertion. The mean activated clotting time was longer for placebo-treated than for heparin-treated patients (201 s versus 127 s;  $P < 0.05$ ). At 30 days after PCI, the proportion of patients who experienced major cardiac events was lower in the placebo group than in the unfractionated heparin group (2.0% versus 3.7%,  $P$  for noninferiority  $< 0.001$ ). Furthermore, a trend toward a reduction in bleeding complications was observed among patients who did not receive heparin. The authors caution that these results should be validated by a large, multicenter trial before a change in practice can be recommended.

**Original article** Stabile E *et al.* (2008) The CIAO (Coronary Interventions Antiplatelet-Based Only) study: a randomized study comparing standard anticoagulation regimen to absence of anticoagulation for elective percutaneous coronary intervention. *J Am Coll Cardiol* 52: 1293–1298

## Elective PCI is commonly performed without prior stress testing for ischemia

The number of patients who undergo elective percutaneous coronary intervention (PCI) for stable coronary artery disease is increasing. However, whether many of these patients have documented ischemia and can, therefore, expect to benefit from such procedures remains unclear. To help clarify this issue, Lin *et al.* have investigated the frequency of stress testing before PCI in a cohort of Medicare beneficiaries in the US.

A total of 23,887 claimants aged  $> 65$  years, who underwent elective PCI in 2004, were included in the analysis. The national average frequency for stress testing within the 90-day