

STEMI for whom PCI is not available within 90 min of admission.

Original article Di Mario C *et al.* (2008) Immediate angioplasty versus standard therapy with rescue angioplasty after thrombolysis in the Combined Abciximab REteplase Stent Study in Acute Myocardial Infarction (CARESS-in-AMI): an open, prospective, randomised, multicentre trial. *Lancet* 371: 559–568

High prevalence of CAD detected by multislice CT in patients with diabetes

Patients with type 2 diabetes mellitus (T2DM) are at high risk of developing coronary artery disease (CAD). Furthermore, in these patients CAD has often reached an advanced stage by the time of diagnosis. Scholte *et al.* investigated the prevalence of CAD in asymptomatic patients with T2DM by multislice CT (MSCT), which permits noninvasive angiography and assessment of the coronary artery calcium burden.

The analysis included 70 patients with T2DM, none of whom had symptoms of CAD. MSCT identified CAD in 56 (80%) patients, including 18 (26%) patients with obstructive CAD. An elevated calcium score was found in 39 (56%) patients. Analysis of plaque morphology in 322 segments of diseased coronary artery revealed 39% calcified plaques, 20% mixed plaques and 41% noncalcified plaques. There was a direct relationship between coronary artery calcium score and incidence of obstructive CAD; however, CAD was present in 17 of the 31 patients with a calcium score below 10, and 3 of these patients had obstructive CAD.

The authors conclude that the prevalence of CAD is high in asymptomatic patients with T2DM, and that, because of the high prevalence of noncalcified plaques in this population, calcium scoring alone is of limited value in assessing CAD. Routine MSCT angiography may provide additional information.

Original article Scholte AJHA *et al.* (2008) Prevalence of coronary artery disease and plaque morphology assessed by multi-slice computed tomography coronary angiography and calcium scoring in asymptomatic patients with type 2 diabetes. *Heart* 94: 290–295

Triple antithrombotic therapy benefits patients treated for atrial fibrillation

Patients with atrial fibrillation receive prophylactic coumarin-based anticoagulation therapy. However, if such patients undergo percutaneous coronary intervention (PCI) and/or stent implantation they additionally require antiplatelet therapy. Currently, there is no consensus as to which antithrombotic strategies provide optimum cardiovascular protection for such patients while minimizing the risk of bleeding complications. No prospective, randomized trials have considered this question, so Ruiz-Nodar and colleagues analyzed the medical registry data of 426 patients with atrial fibrillation (mean age 71.5 years; 70.9% male) who underwent PCI and stent implantation at two Spanish hospitals.

The researchers found wide variation in the antithrombotic therapy regimens used and the duration of treatment. The majority of patients received either aspirin plus clopidogrel (40.8%), or coumarin, aspirin, and clopidogrel (50.0%). During follow-up (median 595 days), the researchers observed the clinical outcomes of these antithrombotic treatment strategies, and they recorded all bleeding events, thromboembolisms, and major adverse cardiac events (such as acute myocardial infarction, target lesion revascularization, or death). Triple therapy was associated with reduced incidences of death (17.8% vs 27.8%; $P=0.002$) and major adverse cardiac events (26.5% vs 38.7%; $P<0.01$). There was no significant increase in bleeding events associated with the coumarin-containing antithrombotic therapy.

The authors recommend triple therapy for patients with atrial fibrillation undergoing PCI with stenting who have a low risk of bleeding complications. They explain that therapies should be tailored to individual patients, with the risk of stent thrombosis and thromboembolism balanced against the risk of bleeding while receiving triple therapy.

Original article Ruiz-Nodar JM *et al.* (2008) Anticoagulant and antiplatelet therapy use in 426 patients with atrial fibrillation undergoing percutaneous coronary intervention and stent implantation: implications for bleeding risk and prognosis. *J Am Coll Cardiol* 51: 818–825