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IN BRIEF

INTERVENTIONAL CARDIOLOGY

MATRIX: radial access safer than femoral access in ACS

The MATRIX Investigators have published the findings of their randomized, superiority trial comparing radial and femoral access for coronary angiography and percutaneous coronary intervention in 8,404 patients with an acute coronary syndrome (ACS). At 30 days, net adverse clinical events had occurred in fewer of the patients in the radial access group (9.8% vs 11.7% with femoral access; RR 0.83, 95% CI 0.73–0.96; $P=0.0092$), mainly owing to fewer instances of major BARC 3 or 5 bleeding (1.6% vs 2.3%; RR 0.67, 95% CI 0.49–0.92; $P=0.0128$) and all-cause death (1.6% vs 2.2%; RR 0.72, 95% CI 0.53–0.99; $P=0.045$). The investigators conclude that “altogether, the results ... suggest that radial access should become the default approach in patients with an ACS undergoing invasive management.”

Original article Valgimigli, M. *et al.* Radial versus femoral access in patients with acute coronary syndromes undergoing invasive management: a randomised multicentre trial. *Lancet* doi:10.1016/S0140-6736(15)60292-6

INTERVENTIONAL CARDIOLOGY

Routine thrombectomy linked with increased risk of stroke

In response to findings from small trials, and subsequent changes to practice guidelines, manual thrombectomy is increasingly being performed before stent deployment in the setting of primary percutaneous coronary intervention (PCI). However, a meta-analysis published in 2010 indicated the possibility of an increased risk of stroke with thrombectomy, and a later trial found no mortality benefit with the procedure. In TOTAL, 10,732 patients with STEMI were randomly assigned to primary PCI with or without upfront manual aspiration thrombectomy. The primary outcome—death from a cardiovascular cause, recurrent myocardial infarction, cardiogenic shock, or NYHA class IV heart failure within 180 days—did not differ between the two treatment groups. However, stroke within 30 days—the key safety outcome—was more likely with thrombectomy + PCI than with PCI alone (0.7% vs 0.3%; HR 2.06, 95% CI 1.13–3.75; $P=0.02$).

Original article Jolly, S. S. *et al.* Randomized trial of primary PCI with or without routine manual thrombectomy. *N. Engl. J. Med.* doi:10.1056/NEJMoa1415098

ARRHYTHMIAS

Surgical AF ablation during mitral valve surgery assessed

Atrial fibrillation (AF) is common among patients with mitral valve disease, and surgical ablation of AF is often performed in these patients when they are undergoing their valve surgery. A randomized trial involving 260 patients has assessed whether surgical ablation of AF during mitral valve surgery is actually associated with reduced recurrence of AF. The primary end point—freedom from AF at 12 months—was more likely among the trial participants who underwent surgical ablation (63.2% vs 29.4%, $P<0.001$). Notably, though, the rate of permanent pacemaker implantation was also significantly higher amongst these individuals (1-year incidence rate ratio 2.64; 95% CI 1.20–6.41; $P=0.01$). The investigators point out that “establishing the effects of ablation on long-term survival, stroke incidence, the need for hospitalization, repeat rhythm procedures, and freedom from anticoagulation therapy requires further study.”

Original article Gillinov, A. M. *et al.* Surgical ablation of atrial fibrillation during mitral-valve surgery. *N. Engl. J. Med.* doi:10.1056/NEJMoa1500528