

Masala

Medical management better in intracranial artery stenosis

In a multicentre trial in the USA, researchers randomly assigned 451 patients with a recent transient ischaemic attack or stroke to optimal medical management or percutaneous transluminal angioplasty and stenting (PTAS) using the Wingspan stent system. The target intracranial artery had 70%–90% luminal stenosis. At 1 month, the rate of stroke/death was 14.7% in the stented group and 5.8% in the medically managed patients ($p=0.002$). At 1 year the corresponding figures in the 2 groups were 20% and 12.2%. It might be prudent to continue optimized medical therapy in such patients (*N Engl J Med* 2011;**365**:993–1003).

Apixaban or warfarin in atrial fibrillation?

Warfarin has been the anticoagulant of choice to prevent embolic strokes in patients with atrial fibrillation. However, anticoagulation in the therapeutic range is difficult to achieve and regular monitoring of the international normalized ratio (INR) is a must. Apixaban, a direct factor Xa inhibitor, was compared with warfarin in a randomized, double-blind trial in 18 021 patients with atrial fibrillation and one other risk factor for stroke. After a median follow up of 1.8 years, stroke or systemic embolism occurred in 1.27% per year in the apixaban group, and 1.6% per year in the warfarin group (hazard ratio with apixaban 0.79). Annual rates of major bleeding were 2.13% in the apixaban group and 3.09% in the warfarin group (hazard ratio 0.69). Since the drug is as effective as warfarin, causes less bleeding and does not require monitoring, it could replace warfarin in this group of patients. A higher cost is its only disadvantage (*N Engl J Med* 2011;**365**:981–92).

Is MRI safe in patients with cardiac implants?

Can patients with an implanted cardiac device safely undergo an MRI? In a large study, 555 MRI examinations were done in 438 patients with either a permanent pacemaker or an implantable cardioverter defibrillator (ICD) *in situ* for longer than 6 weeks. The implanted device was reprogrammed before the study to minimize the adverse effects of electromagnetic radiation. Asynchronous pacing mode was used in all pacemaker-dependent patients. Adjustments were also made in the MRI scanner to take care of artifacts produced when the implanted device was in the MRI field. MRI studies were safely carried out in all patients except one patient with an ICD, in whom the study was terminated due to chest discomfort. The only significant adverse event noted was a reversion to power-on-reset mode in 3 patients. The authors add the caveat that these results are valid only for the devices tested and after careful device programming (*Ann Intern Med* 2011;**155**:415–24).

Discontinuation of medicines after hospital admission

A retrospective population-based cohort study assessed the records of all outpatient prescriptions and hospitalizations in Ontario, Canada from 1997 to 2009. A total of 396 380 patients were included who were above 66 years of age and on 1 of 5 long term treatments—statins, antiplatelets/anticoagulants, levothyroxine, respiratory inhalers or acid-suppressants. Rates of medication discontinuation were compared for 3 groups—outpatients (controls), those admitted to a ward and those admitted to the intensive care unit (ICU). The primary outcome was failure to renew the prescription within 90 days of discharge. Unintentional discontinuation rates were higher for those

hospitalized as compared to controls for all medication groups. The rates were highest for those admitted to the ICU. Adjusted odds ratios for discontinuation of antiplatelets/anticoagulants were as high as 1.86 for ward admissions and 2.31 for those admitted to an ICU. An important reminder, while making discharge summaries, is to include drugs that the patient was taking before admission and to maintain continuity of prescription once the acute indication for admission is over (*JAMA* 2011;**306**:840–7).

No gender equality here

Does smoking affect men and women the same way? Apparently not! A systematic review and meta-analysis sought to assess whether smoking confers the same excess risk of coronary heart disease in men and women. Prospective cohort studies published between 1 January 1966 and 31 December 2010 were included. After adjusting for other cardiovascular risk factors, the pooled adjusted female-to-male relative risk ratio (RRR) of smokers versus non-smokers for coronary heart disease was 1.25 (*Lancet* 2011;**378**:1297–305).

Xanthelasma and cardiovascular disease

The association of xanthelasma and arcus corneae with hyperlipidaemia is well known. Do they also serve as markers of future atherosclerotic cardiac or cerebrovascular events? The Copenhagen City Heart Study followed 12 745 people of 20–93 years of age, free of ischaemic disease at baseline, for a mean of 22 years. Xanthelasmata were present in 4.4% and arcus corneae in 24.8% at baseline. The presence of xanthelasmata, but not of arcus corneae, significantly predicted cardiovascular outcomes. Multifactorially adjusted hazard/odds ratios for those with versus those without xanthelasmata were 1.48 for myocardial infarction and 1.39 (1.20–1.60) for ischaemic heart disease. Cerebrovascular disease rates did not differ between the two groups (*BMJ* 2011;**343**:d5497).

Wake up and smell the coffee

The Nurses' Health Study in the USA recruited 50 739 women and followed them up for 10 years. Participants were free of depression at baseline. Caffeine consumption was assessed using validated questionnaires and measured as cumulative mean consumption. Depression was defined as self-reported physician-diagnosed depression and antidepressant use. The risk of depression fell progressively with increasing coffee consumption. The relative risk of depression for women in the highest versus lowest of the 5 caffeine consumption categories was 0.80. Decaffeinated coffee consumption did not affect the risk of depression (*Arch Intern Med* 2011;**171**:1571–8).

Good news for chocolate lovers

A systematic review and meta-analysis was done to assess the association of chocolate consumption with the risk for coronary artery disease, stroke, diabetes and the metabolic syndrome. Six cohort studies and 1 cross-sectional study met the inclusion criteria. Higher levels of chocolate consumption lowered the risk for cardiometabolic disorders in 5 of 7 studies. Cardiovascular disease risk was 37% lower and that of stroke was 29% lower in those with the highest level of chocolate intake as compared to those with the lowest levels of intake (*BMJ* 2011;**343**:d4488).

VIVEK ARYA