Masala

Keeping it simple in the diagnosis of adnexal masses

In 2008, the International Ovarian Tumor Analysis (IOTA) group described the *Simple rules* for preoperative classification of adnexal masses, which consists of five ultrasound features to distinguish between benign and malignant masses. These features include tumour size and morphology, presence of ascites and the degree of vascularity of the mass. In an international, cross-sectional cohort study, the *Simple rules* were applied to 4848 patients with adnexal masses who subsequently underwent surgery. The overall rate of malignancy in operative specimens was 34%. In patients in whom the *Simple rules* predicted a risk of malignancy of <1%, sensitivity was 99.7% and specificity 33.7% for a negative predictive value (NPV) of 98.9%. For patients with an estimated risk of e"30%, sensitivity was 89.0%, specificity 84.7%, with a positive predictive value of 75.4% (*Am J Obstet Gynecol* 2016;**214:**424–37).

Pre-hospital resuscitation: What is the minimum adequate duration?

Data recorded between 2005 and 2012 were analysed from the All-Japan Utsein Registry. This registry tracks all out-of-hospital cardiac arrests in Japan. A total of 282 183 adults with bystander-witnessed out-of-hospital cardiac arrest, who were attended to by emergency medical services personnel, were included. The primary outcome of resuscitation success was favourable neurological outcome at 30 days. This end-point was achieved in 20% of patients with a shockable rhythm and bystander-initiated rescuscitation; 13.2% of those with a shockable rhythm but no bystander-initiated resuscitation; and in approximately 1% of those with a non-shockable rhythm. Minimum duration of pre-hospital resuscitation was defined as the length of resuscitation efforts in minutes required to achieve e"99% sensitivity for the primary end-point. Pre-hospital duration of resuscitation to achieve pre-hospital return of spontaneous circulation ranged from 1 to 60 minutes. On the basis of time intervals from the shockable arrest groups, the authors recommend that pre-hospital resuscitation efforts should be continued for at least 40 minutes in adults (*Circulation* 2016;**133:**1386–96).

HLA-incompatible live kidney transplant versus maintenance haemodialysis

A multicentric study compared survival between 1025 recipients of renal transplants from HLA-incompatible live donors, 5125 controls who remained on the waiting list for transplantation or received a transplant from a deceased donor, and 5125 controls who remained on the waiting list without receiving a transplant. The study enrolled patients between 1997 and 2011. The mean age of patients was 45, 45.9 and 46.6 years in the three groups, respectively. The survival rate in the three groups was 95%, 94% and 89.6% at one year, 91.7%, 83.6% and 72.7% at three years and 76.5%, 62.9% and 43.9% at eight years of follow-up, respectively. These are compelling figures favouring HLA-incompatible renal transplantation over haemodialysis (*N Engl J Med* 2016;**374**:940–50).

Treating falciparum malaria in pregnant women

In an open-label, multicentric trial in sub-Saharan Africa, pregnant women in the second or third trimester of pregnancy (*n*=3428), who were suffering from falciparum malaria, were randomized to receive one of four artemisinin-based treatments: artemether–lumefantrine, amodiaquine–artesunate, mefloquine–artesunate or dihydroartemisinin–piperaquine. At day 63 of follow-up, polymerase chain reaction-based tests were used to assess cure. Cure rates were over 95% for all regimens, being the highest (99.2%) in the dihydroartemisinin–piperaquine group and the lowest (94.8%) in the artemether–lumefantrine group. Outcomes of pregnancy were similar in the four groups; drug-related adverse events were lowest in those given artemether–lumefantrine or dihydroartemisinin–piperaquine. Protection against re-infection was the least for artemether–lumefantrine. This trial establishes the safety and efficacy of using artemisinin-based combination therapy in pregnant women with falciparum malaria (*N Engl J Med* 2016;**374:**913–27).

Outcomes after transient ischaemic attack (TIA) or minor stroke

Between 2009 and 2011, the *www.TIAregistry.org* investigators enrolled 4789 patients in 21 countries who had had a TIA or a minor stroke. One-third of patients had an acute brain infarction and 10.4% had atrial fibrillation. The composite outcome of subsequent stroke, an acute coronary syndrome or death from cardiovascular causes at one year was estimated to occur in 6.2% of patients. Estimates of the stroke rate at days 2, 7, 30, 90, and 365 were 1.5%, 2.1%, 2.8%, 3.7%, and 5.1%, respectively. Factors that increased the risk of stroke included multiple infarctions on brain imaging, large-artery atherosclerosis, and a composite prediction score ($ABCD^2$) of 6 or 7. The score comprises of age, blood pressure, clinical findings, duration of symptoms, and presence or absence of diabetes. (*N Engl J Med* 2016;**374:**1533–42).

Legacy effect of statin therapy: Follow-up of the WOSCOPS trial

The West of Scotland Coronary Prevention Study (WOSCOPS) was a primary prevention trial in 45–64-year-old men with high low-density lipoprotein cholesterol. The trial randomized 6595 men to pravastatin 40 mg once daily or placebo for an average of 4.9 years. Five years after the trial was completed, 38.7% and 35.2% of participants in the pravastatin and the placebo groups, respectively, were taking statins. No data were available for the next 10 years. Electronic health records were used to analyse outcomes at 20 years from trial initiation. Men initially allocated to pravastatin had 13% reduction in all-cause mortality at 20 years with a 21% decrease in cardiovascular death. Cumulative hospitalization event rates were lower by 18% for any coronary event, by 24% for myocardial infarction, and by 35% for heart failure in the pravastatin arm. The benefits of initial statin treatment appear to persist even after discontinuing statin therapy (*Circulation* 2016;**133**:1073–80).

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