Masala

To test or not to test?

Is a given test truly necessary? Is it evidence-based? Free from harm? To help physicians and patients make informed choices about diagnostic tests, the American Board of Internal Medicine (ABIM) Foundation has launched the ‘Choosing wisely’ initiative. National organizations in the USA who represent various medical specialties were asked to identify five common tests or procedures in their field whose necessity needs to be discussed between physicians and patients. This resulted in a set of lists—‘Five things physicians and patients should question’—which are freely available on the Choosing wisely website. Included in the lists are common tests such as imaging for low back pain, antibiotics for acute sinusitis, annual electrocardiogram in healthy individuals and routine preoperative chest X-ray (www.choosingwisely.org/doctor-patient-lists/ accessed on 3 Apr 2013).

All in the family

A systematic review and meta-analysis assessed the extent to which various autoimmune disorders aggregate in the same family, a phenomenon called familial autoimmunity. Familial aggregation of autoimmune thyroid disease, systemic lupus erythematosus, type 1 diabetes, rheumatoid arthritis and multiple sclerosis were evaluated from 44 eligible articles. Autoimmune thyroid disease, especially Graves disease had the highest familial association with a relative risk for pernicious anaemia in patients with Graves disease being as high as 14.1. Similarly, autoimmune thyroid disease and type 1 diabetes were more likely to occur in the relatives of patients with rheumatoid arthritis. The incidence of autoimmune diseases in first degree relatives was significantly more for all autoimmune disorders. These findings suggest the presence of common underlying immune dysfunction as the basis of multiple autoimmune disorders (BMC Medicine 2013;11:73 doi:10.1186/1741-7015-11-73).

Oral therapy in diabetic kidney disease

The safety and efficacy of the glucagon-like peptide-1 (GLP-1) analogue linagliptin was evaluated in a randomized, double-blind, placebo-controlled trial that included 133 patients with type 2 diabetes mellitus having severe renal impairment. Linagliptin 5 mg daily (n=68) or placebo (n=65) was added to background therapy. At 1 year, glycated haemoglobin (HbA1c) improvements were sustained with linagliptin (–0.71%) over placebo (+0.01%). The mean insulin doses decreased by 6.2 units with linagliptin and 0.3 units with placebo. The overall incidence of adverse events was similar with only 3 patients in each group developing severe hypoglycaemia. Renal function remained stable in both groups. Linagliptin seems to offer a safe oral therapy in these patients when used as an add-on to insulin (Diabetes Care 2013;36:237–44).

New influenza virus

From China comes the news of a new influenza threat. Three adult patients with severe lower respiratory tract infections were found to be infected with a new influenza virus strain. This strain, H7N9, is derived from genetic re-assembly of avian influenza viruses. All three patients were treated with oseltamivir but died of adult respiratory distress syndrome (ARDS) and multi-organ failure, possibly due to the 1-week delay in starting treatment. Infection seems to have been acquired following contact with poultry and no cases of human-to-human transmission have been reported. Time to keep one’s fingers crossed! (N Engl J Med 2013; doi: 10.1056/NEJMoa1304459.)

CABG: Off-pump or on-pump?

Investigators for the CORONARY trial randomized 4752 patients with coronary artery disease to undergo coronary artery bypass grafting (CABG) performed using on-pump (with cardiopulmonary bypass) (n=2377) or off-pump (beating heart) (n=2375) techniques. At 30 days, the rates of bleeding, acute kidney complications and respiratory complications were significantly lower in the off-pump group. At both 30 days and at 1 year of follow-up, there was no difference between the two groups in terms of the composite outcome of death, stroke, myocardial infarction or renal failure requiring dialysis. The rates of repeat coronary revascularization, the quality of life and neurocognitive function were similar in the two groups. In experienced hands, off-pump CABG appears to be safer and as effective as the on-pump procedure (N Engl J Med 2013;368:1179–88).

Tamoxifen for 10 years in breast carcinoma

The oestrogen receptor antagonist tamoxifen reduces recurrence and mortality when given postoperatively in early, oestrogen receptor (ER)-positive breast cancer. ATLAS, a worldwide trial, randomized 12 894 women with early breast cancer who had completed 5 years of therapy with tamoxifen to either continue the drug for 5 more years or to stop using it. ER-positivity was found in 6846 women. Of these, among women who continued tamoxifen for a further 5 years (n=3428), cancer mortality was significantly lower (331 v. 397 deaths, p=0·01) as was overall mortality (639 v. 722 deaths, p=0·01) compared to that among 3418 patients who stopped tamoxifen. Endometrial carcinoma occurred in 3.1% of women who continued tamoxifen and in 1.6% of those who discontinued the drug. No benefit of tamoxifen therapy was seen in women with ER-negative cancers. Extending tamoxifen therapy to 10 years could save more lives with a small increase in the incidence of endometrial cancer (Lancet 2013;381:805–16).

Outcomes after cardiac arrest in elderly patients

The American Heart Association Get with the Guidelines—Resuscitation Investigators studied long-term outcomes in elderly patients who survived an in-hospital cardiac arrest. Using data from a national registry of inpatient cardiac arrests along with Medicare files, they identified 6972 such patients (≥65 years of age) from 2000 to 2008. One year following discharge from hospital, 58.5% of patients were alive and 34.4% had not been readmitted. Survival rates were higher in younger patients, among women and among white patients. Risk-adjusted survival rates were 72.8% among those with no neurological disability and 10.2% among those in a coma or vegetative state at discharge. The rate of survival at 3 years was comparable to that among patients who had been hospitalized for heart failure (43.5% and 44.9%, respectively). Good reason to perform diligent cardiopulmonary resuscitation in elderly patients (N Engl J Med 2013;368:1019–26).

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