Masala

Long-term results of face transplantation

The French team that pioneered face transplantation has recently published the results of their single-centre, prospective, open-label study assessing 20 patients who had initially presented with facial defects. Of these, 7 patients underwent face transplantation—2 for neurofibromatosis, 1 for burns and 4 for self-inflicted facial gunshot injuries. Over a mean follow-up of 6 years, 2 patients died: one at 65 days due to transplant destruction with concomitant *Pseudomonas* infection and the other committed suicide 3.4 years after the transplant. The patients who survived had multiple episodes of transplant rejection and were given high-dose maintenance steroids. None of the patients developed diabetes, 3 developed hypertension and all had a reduction in their glomerular filtration rate. Although all recipients and their families accepted their transplant, improvements in social integration and quality of life were highly variable. The level of social support and baseline psychiatric status were important predictors of transplant outcomes (*Lancet* 2016;**388:**1398–407).

Don't just sit there, do something!

Sitting for prolonged periods of time is known to increase mortality. A systematic review evaluated 13 prospective cohort studies to assess how physical activity could modify this effect. These studies included 1 005 791 individuals who were followed up for 2–18.1 years. Of these, 84 609 (8.4%) died during the study period. Compared with those sitting <4 hours/day and in the most physically active quartile, mortality rates were 12%–59% higher in the two lowest quartiles of physical activity. Interestingly, daily sitting time was not associated with increased all-cause mortality in those in the most active quartile of physical activity. There was no increase in mortality in those who sat more than 8 hours per day but had the highest level of physical activity. The authors concluded that high levels of moderate intensity physical activity (i.e. about 60–75 minutes per day) seem to eliminate the increased risk of death associated with high sitting time (*Lancet* 2016;**388:**1302–10).

Drug-eluting coronary stents or bare-metal ones?

The Norwegian Coronary Stent Trial (NORSTENT) was a multicentre, randomized trial. Patients with coronary artery disease undergoing percutaneous coronary intervention (n=9013) were randomly assigned to receive either contemporary drug-eluting or bare-metal stents. After a median follow-up of 5 years, the primary outcome, a composite of death from any cause and non-fatal spontaneous myocardial infarction occurred in 16.6% of patients in the drug-eluting stents group and in 17.1% of those in the bare-metal stents group. However, the 6-year rates of repeat revascularization were significantly higher in patients who received bare-metal stents (19.8% *v*. 16.5% in those receiving drug-eluting stents). Also, the rates of definite stent thrombosis were 50% higher in the bare-metal stents group (1.2% *v*. 0.8%). Measures of quality of life were similar in the two groups (*N Engl J Med* 2016;**375:**1242–52).

Early prostate cancer: To treat or not to treat?

Controversy plagues the management of prostate-specific antigen (PSA)-detected early carcinoma prostate. The multicentric Prostate Testing for Cancer and Treatment (ProtecT) trial from the UK addressed this issue. Between 1999 and 2009, a total of 82 429 men 50 to 69 years of age received a PSA test; 2664 received a diagnosis of localized prostate cancer. Of these, 1643 were randomized to either active monitoring (n=545), radical prostatectomy (n=553) or radiotherapy (n=545). Over a median follow-up of 10 years, the number of deaths and the all-cause mortality were similar in the three groups. Rates of disease progression were comparable in the surgery and radiotherapy groups but were much higher in the patients assigned to active monitoring. Metastases also occurred more often in men randomized to active monitoring than in those in the other two groups (*N Engl J Med* 2016;**375:**1415–24).

Don't miss hypothyroidism in older patients

Researchers in Denmark carried out a population-based study to investigate the correlation between the diagnosis of hypothyroidism and the symptoms in both young and old people. Patients with newly diagnosed overt autoimmune hypothyroidism were identified (n=140) and matched with 560 normal controls. The presence and duration of symptoms in various age groups (young <50, middle age 50–59 and old ≥60 years) was assessed using self-administered questionnaires. In young hypothyroid patients, all 13 hypothyroidism-associated symptoms were seen more often in patients than in matched controls. By contrast, in older patients only three such symptoms were found more often in patients compared to controls. The mean numbers of symptoms at disease onset were 6.2, 5.0 and 3.6 at the ages of 0–49, 50–59 and ≥60 years, respectively. Older individuals have fewer symptoms of hypothyroidism which are often non-specific (*Am J Med* 2016; **129:**1082–92).

Calcium supplementation and the risk of cardiovascular disease

There has been much hype recently in the lay press regarding the increased risk of coronary artery disease resulting from the use of calcium supplements. The National Osteoporosis Foundation and American Society for Preventive Cardiology convened an expert panel to address this issue. Based on available evidence, it was concluded that there was moderate-quality evidence that intake of calcium with or without vitamin D from food or supplements has no relationship (beneficial or harmful) to the risk for cardiovascular and cerebrovascular disease, mortality or all-cause mortality in healthy adults. The tolerable upper level of intake defined by the National Academy of Medicine as 2000–2500 mg/day was considered safe for cardiovascular health (*Ann Intern Med* 2016 doi:10.7326/M16-1743).

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