Clinical shorts

Drug treatment for generalized anxiety disorder

Selective serotonin reuptake inhibitors are the most effective drug treatment option for patients with generalized anxiety disorder. This is the conclusion of a systematic review and meta-analysis that included 27 randomized controlled trials of adults receiving pharmacologic treatment for generalized anxiety disorder. Three primary outcomes were considered for the nine drugs compared in the study: response and remission as measures of efficacy and withdrawals as a measure of tolerability. In probabilistic analysis, fluoxetine was ranked first for response and remission, whereas sertraline was associated with the lowest percentage of withdrawals. The meta-analysis was limited by the small number of trials comparing one drug with another; placebo was often the common comparator. See *BMJ* 2011;342:d1199 doi:10.1136/bmj.d1199.

Olmesartan and microalbuminuria

Would treatment with an angiotensin-receptor blocker such as olmesartan delay or prevent the occurrence of microalbuminuria in patients with type 2 diabetes and normoalbuminuria? Yes it would, but it could also increase the number of fatal cardiovascular events. This is the finding of a placebo-controlled randomized controlled trial involving 4447 patients who received olmesartan or placebo for a median of 3.2 years. Additional antihypertensive drugs (except angiotensin-converting-enzyme inhibitors or angiotensin receptor blockers) were used as needed to lower blood pressure with excellent control in both groups of patients. Microalbuminuria developed in 8.2% of the patients in the olmesartan group and in 9.8% of patients in the placebo group, and the time to the onset of microalbuminuria was increased by 23% with olmesartan (hazard ratio [HR] 0.77; 95% confidence interval [CI], 0.63 to

0.94; $p = 0.01$). Fifteen patients taking olmesartan had fatal cardiovascular events (0.7%), as compared with three patients who were given placebos (0.1%) ($p = 0.01$). See *N Engl J Med* 2011;364:907-17.

Early versus delayed percutaneous tracheotomy

When compared with prolonged ventilation, possibly followed by late tracheotomy, early percutaneous tracheotomy did not reduce mortality, infectious complication rates, duration of mechanical ventilation and length of hospital stay in patients who needed prolonged mechanical ventilation after cardiac surgery. It did, however, result in less sedation, more comfort and earlier ambulation. This is what researchers found in their prospective randomized controlled trial that involved 216 patients who still required mechanical ventilation four days after cardiac surgery. They randomized patients to have tracheotomy either on the fourth day or two weeks after intubation. This study was done in a single centre, limiting the ability to generalize its results. Moreover, only 27% of patients in the prolonged intubation group had late tracheotomy, and this might have diluted the overall early tracheotomy effect on the entire cohort. See *Ann Intern Med* 2011;154:373-83.

Irbesartan in patients with atrial fibrillation

Irbesartan, an angiotensin-receptor blocker, did not reduce cardiovascular events in patients with atrial fibrillation in a randomized, double-blind, placebo-controlled trial. Over 9000 patients with a history of risk factors for stroke and a systolic blood pressure of at least 110 mm Hg were enrolled and followed for a mean of 4.1 years. The trial used complicated outcomes. The first coprimary outcome was stroke, myocardial infarction or death from vascular causes; the second coprimary outcome was the

first composite coprimary outcome plus admission to hospital for heart failure. The first coprimary outcome occurred at a rate of 5.4% per 100 person-years in both groups (HR 0.99; 95% CI 0.91–1.08; $p = 0.85$). The second coprimary outcome occurred at a rate of 7.3% per 100 person-years among patients receiving irbesartan and 7.7% per 100 person-years among patients receiving placebo (HR 0.94; 95% CI 0.87–1.02; $p = 0.12$). See *N Engl J Med* 2011;364:928-38.

Radial artery grafts in coronary artery bypass surgery

The success of coronary artery bypass surgery largely depends on the long-term patency of the arterial or venous grafts used. With good results in using left internal mammary artery grafts to the left anterior descending coronary artery, surgeons have been looking at the use of other arterial grafts. In this randomized controlled trial, 757 participants undergoing first-time elective coronary artery bypass surgery had grafting of the left anterior descending coronary artery using the left internal mammary artery when possible; they were then randomized to radial artery or saphenous vein grafting for the best remaining recipient artery. At one year, there was no significant difference in study graft patency assessed by angiography between the two groups (89% for both groups), nor were there significant differences in the rates of myocardial infarction, stroke, repeat revascularization or death. The authors acknowledge, however, that there was more disease (e.g. partial stenosis) in the radial artery grafts at one week and at one year, despite patency. What will happen with the grafts in the longer term is unclear. All but six participants were men. See *JAMA* 2011;305:167-74.

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