



## **β blockers—first choice in the treatment of hypertension?**

One year ago ([NZMJ 17 December 2004](#)), we abstracted a Swedish paper that cast doubts on the role of atenolol in hypertension. Now, the same authors report on a meta-analysis involving 127,879 patients in which they review the role of all β blockers as first-line antihypertensive drugs, bearing in mind that they are commonly recommended in this role. And their conclusion is that “the effect of β blockers is less than optimum, with a raised risk of stroke. Hence, we believe that β blockers should not remain first choice in the treatment of primary hypertension and should not be used as reference drugs in future randomised controlled trials of hypertension.” Strong words. However, they say that β blockers do lower blood pressure to the same extent as other drugs—but are less effective in stroke prevention. An accompanying editorial agrees with their views but reminds us that some patients genuinely do need β blockers as their first line therapy—specifically those with coronary artery disease.

Lancet 2005;366:1545–53 & 1510–11

## **Hospitalisation before and after gastric bypass surgery**

The use of Roux-en-Y gastric bypass (RYGB) has been reported to be effective in the treatment of obesity and its related comorbidities—in particular diabetes, hyperlipidemia, hypertension and obstructive sleep apnea. Amazingly, more than 100,000 such procedures are performed annually in the United States. One would suspect that vanity might also figure in the indication for surgery list. Anyway, how effective is it in terms of health, as measured by post surgical hospitalisation? A recent study from California reports on 60,077 patients who underwent RYGB. Apparently, the rate of hospitalisation in the year following RYGB was more than double the rate in the year preceding RYGB ( $p < .001$ ). And the rates were similar in the second and third years. The most common reasons for admission prior to RYGB were obesity-related problems (e.g. osteoarthritis, lower extremity cellulitis), and elective operation (e.g. hysterectomy), while the most common reasons for admission after RYGB were complications often thought to be procedure related, such as ventral hernia repair and gastric revision. Swings and roundabouts.

JAMA 2005;294:1918–24

## **What about warfarin after myocardial infarction?**

Patients with a history of myocardial infarction are at increased risk for recurrent infarction, stroke and death. Several interventions have proven beneficial in the secondary prevention of myocardial infarction, including β blockers, angiotensin-converting enzyme inhibitors, lipid-lowering therapy, and aspirin. Although some studies have shown that addition of warfarin to aspirin decreases subsequent risk for cardiovascular events, this has not become standard management principally because of the dangers of haemorrhage. A recent meta-analysis of ten trials involving over

11,000 patients concludes that the cardiovascular benefits of warfarin outweigh the bleeding risks in patients who have a myocardial infarction or an acute coronary syndrome, provided that they have a low or intermediate risk for bleeding. A very important provision! The report did not include patients with coronary stents and the findings may not apply to them.

Ann Intern Med 2005;143:241–50

### ***Clostridium difficile* colitis after colorectal surgery**

Apparently *Clostridium difficile* colitis is a known complication of colon and rectal surgery occurring in over 20% of such patients. In the USA at least, prophylactic antibiotics have become standard in elective colon and rectal surgery, but controversy persists on the ideal choice and route of antibiotics: oral, intravenous (IV), or both in combination. The authors of this study report on a cohort of 304 patients, including 107 who had pre-operative oral antibiotics. They found that the rate of post-operative *C. difficile* colitis was 4.2% in the entire study population. The rate of *C. difficile* infection was higher in patients who received oral antibiotics (7.4%) compared with patients who did not receive oral antibiotics (2.6%;  $P=0.03$ ). There were no *C. difficile*-related mortalities. Consequently they “recommended that oral nonabsorbable antibiotics not be used in pre-operative bowel preparation regimens since post-operative *C. difficile* infection can lead to additional morbidity, length of stay, and hospital costs.” Seems reasonable.

Arch Surg 2005;140:752–6

### **Vasodilator therapy in severe aortic regurgitation**

Severe aortic regurgitation is optimally treated by aortic-valve replacement, otherwise the defect causes left ventricular volume overload, leading to progressive dilatation of the chamber and eventual deterioration in left ventricular function—and death. A suggestion was made several years ago that vasodilator therapy could preserve left ventricular function and *delay the need for surgery*. This theory has been tested in a recent Spanish trial. They randomly assigned 95 patients with asymptomatic severe aortic regurgitation and normal left ventricular function to receive nifedipine, enalapril, or no treatment, to identify the possible beneficial effects of vasodilator therapy on left ventricular function. After a mean of seven years of follow-up, the rate of aortic-valve replacement was similar among the groups: 39% in the control group, 50% in the enalapril group, and 41% in the nifedipine group ( $P=0.62$ ). Furthermore, such therapy did not reduce the aortic regurgitant volume, decrease the size of the left ventricle, or improve left ventricular function.

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