

Protecting islet cells

A monoclonal antibody treatment shows promise for the management of type 1 diabetes. Researchers in the United States gave 12 of 24 newly diagnosed diabetics in whom antibodies were detected a 14-day course of anti-CD3 monoclonal antibody. A year later, when most of the control patients showed a marked diminution in insulin production, nine of the 12 patients in the intervention group had maintained, or even improved, their baseline level of insulin production. The treatment also resulted in significant decreases in both HbA_{1c} levels and requirements for exogenous insulin.

N Engl J Med 2002; 346: 1692-1698

Tackling the burden

According to the evidence so far, screening for depression in primary care is worthwhile. A review prepared for the US Preventive Services Task Force considered 14 randomised trials. Feedback of screening results to the doctor generally increased the recognition of depression, especially major depression, by a factor of two or three. Whether screening resulted in better patient outcomes was less clear. However, when the results of seven trials were combined, it appeared that screening had facilitated a 9% increase in the proportion of patients achieving remission at six months. The authors note that two recent trials of screening for depression, followed by integrated support for treatment, suggest that such programs can produce cost-effectiveness ratios similar to screening mammography or the treatment of mild to moderate hypertension.

Ann Intern Med 2002; 136: 765-776

I stay dry with a little help from my friends

Australian researchers have shown that a simple intervention can decrease urinary incontinence after childbirth. A randomised controlled trial¹ targeted women at risk of urinary incontinence (those with large babies or who had required assisted vaginal delivery). A physiotherapist visited each of the 348 women in the intervention group the day after delivery, providing information, training in pelvic floor exercises, aids to compliance and a special booklet, with a follow-up visit at eight weeks. Three months after delivery, women in the intervention group were more likely than controls to be doing their exercises at least three times a week (84% v 58%), less likely to report any symptoms of incontinence (31% v 38%), and less likely to report severe incontinence (10% v 17%).

Meanwhile, Canadian research demonstrates the efficacy of "nurse continence advisers".² Researchers used advertising to recruit 421 men and women with urinary incontinence. Patients in the treatment group each received an individually tailored program of lifestyle and behavioural interventions, including a follow-up appointment every four weeks. After six months, incontinence episodes and pad use were virtually halved in the treatment group, compared with minimal improvement in the control group.

1. *BMJ* 2002; 324: 1241-1246
2. *CMAJ* 2002; 166: 1267-1273



Important tip from MRFIT

A follow-up study of the Multiple Risk Factor Intervention Trial (MRFIT) confirms that both systolic and diastolic blood pressure predict cardiovascular risk. In this US study initiated in the early 1970s, 342815 men aged 35 to 57 years had their blood pressure recorded. For this analysis, they were divided into two groups, according to their age at MRFIT screening (35-44 and 45-57). Over 22 years of follow-up, 25721 men died of cardiovascular disease. Higher mortality was associated with elevation of both systolic and diastolic blood pressure. In the men aged 45-57 years at baseline with high normal blood pressure or hypertension, a high systolic and low diastolic blood pressure (and consequent high pulse pressure) was also associated with greater cardiovascular disease risk, and may be a marker for end-organ damage.

JAMA 2002; 287: 2677-2683

Risk of clots

Another review, performed for the US Preventive Services Task Force, quantifies the association between postmenopausal oestrogen replacement therapy (ORT) and venous thromboembolism.¹ The baseline risk in the 12 studies included was 1.3 thromboembolic events per 10000 women per year. A further 1.5 events could be expected in women taking ORT. The increase in risk was greatest in the first year of taking ORT (relative risk, 3.49).

The link between long-haul flights and venous thromboembolism is more difficult to measure. Participants in a meeting convened by the World Health Organization in 2001 considered the available evidence (from case reports, case-control studies and observational studies), concluding that a link probably exists, but that it is not quantifiable owing to a lack of data.²

1. *Ann Intern Med* 2002; 136: 680-690
2. *Bull World Health Organ* 2002; 80: 4