Short cuts

What's new in the other general journals

Psoriasis is a risk factor for heart attack

People with psoriasis seem to have an increased risk of heart attack. The link is particularly noticeable in younger people with severe disease; in a large cohort study of patients from UK general practices, 30 year old patients with severe disease were more than three times more likely to have a heart attack than matched controls (relative risk 3.10 (95% CI 1.98 to 4.86)). The relative risk for 30 year olds with mild disease was a lower but still significant 1.29 (1.14 to 1.46).

Psoriasis is the commonest autoimmune disease mediated by type 1 T helper (Th1) cells and the authors think it likely that immunological mechanisms are responsible. A similar association been reported among patients with rheumatoid arthritis, another disease mediated by Th1 cells.

It's impossible to be certain, however. Although these authors controlled for the traditional risk factors for heart disease such as hypertension, smoking, and dyslipidaemia, they weren't able to rule out the possibility that the treatment, not the disease, increased patients' risk of a heart attack. Data on anti-inflammatory drugs for psoriatic arthritis would have been useful, for example.

Whatever the reason, psoriasis seems to be a risk factor for heart attack. Doctors should encourage young people with the disease to protect their coronary arteries from other insults such as smoking.

JAMA 2006;296:1735-41

Atypical antipsychotics have only a limited role in Alzheimer's disease

Traditional clinical trials don't really do justice to treatments for Alzheimer's disease because they rarely mimic the complex

world of clinical practice where patients and their symptoms vary over time, and drug doses are titrated up and down or stopped altogether because of side effects. To overcome some of these problems, US researchers designed a more pragmatic trial to test whether widely used atypical antipsychotic drugs were useful in the real world for controlling patients' behavioural problems. They weren't. About half the 421 patients stopped taking their study medication within eight weeks, and 63% had stopped or switched by week 12. The median time to discontinuation was similar for risperidone (7.4 weeks), quetiapine (5.3), olanzapine (8.1), and placebo (8.0). All three active treatments were more likely to be stopped because of side effects, whereas placebo tablets were most likely to be stopped because they didn't work. Parkinsonism, sedation, and confusion were the biggest problems for patients taking active treatments.

A linked editorial (pp 1604-6) concludes that any modest clinical benefits of these drugs are generally offset by side effects, so their overall value is limited outside the close confines of a clinical trial.

N Engl J Med 2006;355:1525-38

ACE inhibitors don't prevent diabetes

Diet and exercise are the best way to prevent type 2 diabetes, but researchers continue to look for drugs to supplement the effects of these difficult lifestyle changes. Angiotensin converting enzyme (ACE) inhibitors are one potential candidate, but ramipril failed to perform as expected in a recent randomised trial. Patients with impaired glucose metabolism but no cardiovascular disease took up to 15 mg a day of ramipril or a placebo for three years. Ramipril didn't prevent diabetes, which developed in 17.1% (449/2623) of the ramipril group and 18.5% (489/2646) of the placebo group. But it did help to improve some measures of glucose metabolism. These results are from the second half of a trial in more than 5000 people that evaluated both ramipril and rosiglitazone. There were no significant interactions between the two drugs. The more favourable results for rosiglitazone have already been published (hazard ratio for diabetes or death 0.40 (95% CI 0.35 to 0.46), *Lancet* 2006;368:1096-105).

The authors aren't sure why ramipril failed to prevent diabetes in this population when similar drugs seemed to prevent

diabetes as a happy side effect in cardiovascular trials. Their follow-up will continue. In the meantime, the authors and an editorial (pp 1608-10) caution against prescribing ACE inhibitors for the prevention of diabetes.

N Engl J Med 2006;355:1551-62

Observational study favours percutaneous coronary intervention for treating heart attack

Randomised clinical trials suggest that percutaneous coronary intervention is often a better treatment for heart attack than fibrinolytic drugs. But is it still better? It certainly looks that way for patients in Sweden. Analysis of data from a large (n = 26 205) and nearly complete register of coronary care patients shows that those who had percutaneous coronary intervention soon after their heart attack did significantly better over the next year than those who had thrombolysis either in the ambulance or later in hospital. The percutaneous intervention was associated with lower mortality (7.6% v 15.9% for in-hospital thrombolysis, hazard ratio 0.68 (95% CI 0.60 to 0.76)), fewer repeat heart attacks, shorter hospital stay, and fewer readmissions to hospital. The patients who had percutaneous intervention were younger and fitter than the others, but the authors did their best to adjust for these and dozens of other factors that might have

influenced outcome by means of a "propensity score" (the likelihood of being offered percutaneous intervention).

Although this kind of observational study can never establish beyond doubt that one treatment works better than another, these findings certainly add to the weight of evidence in favour of percutaneous coronary intervention for patients with heart attack and ST segment elevation on their electrocardiogram.

JAMA 2006;296:1749-56

Survivors of childhood cancer often develop chronic ill health as adults

A landmark cohort study has found alarming rates of chronic disease among adult survivors of childhood cancer. Compared with their brothers and sisters, cancer survivors were three times more likely to have a chronic health problem (relative risk 3.3 (95% CI 3.0 to 3.5)), eight times more likely to have a severe or life threatening condition (8.2 (6.9 to 9.7)), and nearly five times more likely to have multiple conditions (4.9 (4.4 to 5.5)) when surveyed between six and 30 years after their "cure." Joint replacements, heart failure, coronary heart disease, severe cognitive dysfunction, and other cancers were all at least 10 times more common among cancer survivors. The risk of ill health increased over time so that 25 years after their original cancer more than two thirds (66.8%) of the cohort had at least one chronic health problem, and in a third (33.1%) the problem was severe, disabling, life threatening, or fatal. Survivors of bone tumours, central nervous system tumours, and Hodgkin's disease were most at risk.

The 10 397 men and women in this cohort were all treated in the 1970s and 1980s during the early years of

chemotherapy and radiotherapy for childhood cancers. They are now a highly vulnerable population, and most have parted company with the specialists and other healthcare workers who cared for them initially. A reliable system for lifelong follow-up of all children with cancer is clearly required, writes one commentator (pp 1522-3).

N Engl J Med 2006;355:1572-82

Daily weighing and face to face group support help successful slimmers stay slim

One of the biggest challenges facing people dieting is how to keep the weight off once they have lost it. There are few proved interventions to help them, but a recent trial shows that a programme based on daily weighing, self regulation of eating and exercising, and monthly support sessions can work. The 314 participants, all of whom had lost 10% or more of their body weight, enrolled in one of three programmes designed to stop weight regain. The first two had similar content, but it was delivered either face to face or on line. The third, a quarterly newsletter, acted as a control.

The face to face programme worked best. During the 18 months of the trial, people in this group regained only 2.5 kg on average, significantly less than controls, who gained 4.9 kg. The online programme was less successful, possibly because fewer people stuck to the protocol. Attendance at the online chatroom sessions fell to 34% by the end of the study, by which time people in this group had regained a mean of 4.7 kg, about the same as controls. Daily weighing seemed an important part of both active programmes. People who did it religiously were less likely to regain an

unhealthy amount of weight (≥ 2.3 kg) than those who slacked off.

N Engl J Med 2006;355:1563-71

US children miss out on vaccinations if they are allowed

Children entering US schools are required to meet their state's vaccination requirements unless they have a good reason not to. All states exempt children on medical grounds. Others allow religious exemptions, and some allow parents to opt out of vaccinating their children because of personal beliefs. The easier it is, the more likely parents are to opt out, according to an analysis of nationwide exemptions between 1991 and 2004.

Exemptions were significantly more common in states that allowed parents a personal choice and in states that made it easy for parents to opt out for any reason by decreasing the red tape. The number of exemptions increased significantly during the study for both groups of states. Perhaps more importantly, allowing parents a personal choice was associated with a 48% increase in the incidence of whooping cough (incidence rate ratio 1.48 (95% CI 1.03 to 2.13)). Making it easy to opt out was associated with a 53% increase in incidence (1.53 (1.10 to 2.14)) even after allowing for the demographics of the state.

These findings suggest that modern parents are less worried about childhood diseases than they are about the safety of vaccines, write the authors. They also show that state policies have a measurable impact on the numbers of children vaccinated and on the incidence of dangerous diseases.

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