In other journals 5 FEBRUARY

CUSTOM CANCER TREATMENT

Creating a genetic profile of non-small-cell lung cancers may help predict prognosis and survival for individual patients, a Taiwanese study suggests.[1] Researchers selected five genes as a signature of individual cancer specimens from 125 patients with this cancer, and found that this signature was an independent predictor of relapse-free and overall survival. The results of this study may lead to a refinement in the treatment of lung cancer, with only those patients having the high-risk gene signature being subjected to Cisplatin-based adjuvant chemotherapy. An accompanying editorial predicts that cancer genomics will expand into prospective trials designed to explore the response to standard and novel therapies of patients selected based on their molecular signature.[2]

1. N Engl J Med 2007; 356: 11-20

2. N Engl J Med 2007; 356: 76-78

MAD COWS AND ENGLISHMEN

It may be possible to remove the agent causing transmissible spongiform encephalopathies from donated blood using an adsorptive resin, according to a combined UK and US study. Researchers inoculated leucoreduced, scrapie-infected blood into the brains of hamsters and determined the rate of infection before and after pre-treatment with affinity ligands fixed on a chromatographic resin. Leucoreduction is a process in which leucocyte numbers are significantly reduced prior to transfusion. The results of using the resins were compared with leucoreduction alone. Passage through the resins resulted in reducing blood-associated infectivity to below the limit of detection. The authors comment that, given the estimated number of individuals infected with variant Creutzfeldt–Jakob disease in the UK is around 4000, the method may prove invaluable in reducing the risk of transmission through blood transfusion.

Lancet 2006; 368: 2226-2230

WE ARE THE CHAMPIONS

Self-management can be more successful than standard care in the treatment of men with lower urinary tract symptoms, a British randomised controlled trial has revealed.[1] Researchers placed 140 men with uncomplicated urinary tract symptoms into two groups, one of which received standard medical care based on initial watchful waiting, with escalation to medical treatment and surgery left to the discretion of the clinician and patient. In addition to standard care, the intervention group took part in sessions run by urology nurse specialists aimed at bringing about lifestyle modification and behavioural changes, such as fluid management and bladder retraining. Patients were followed up by clinicians at 3, 6 and 12 months. Treatment failure was defined as: a rise of three points or more on the international prostate symptom score; use of drugs to control lower urinary tract symptoms; occurrence of acute urinary retention; or surgical intervention. Failure was significantly more frequent in the group randomised to standard care alone. Those in the self-management arm had less severe symptoms at all stages of follow-up. Although an accompanying commentary suggested interpreting the results with caution until larger trials are completed, the results were considered promising in terms of improving patient quality of life and reducing the financial burden on health care systems.[2]

1. BMJ 2007; 334: 25

2. BMJ 2007; 334: 2

STRAIGHT TO THE HEART

Pexelizumab given to high-risk patients as an adjunct to coronary reperfusion does not improve mortality at 30 days, a large, multicentre, placebo-controlled study has shown. Pexelizumab, a humanised, monoclonal antibody that binds to the C5 component of complement, has previously been shown to favourably affect outcomes in myocardial infarction when given as an intravenous infusion. Over 5000 patients from 17 countries were enrolled in the trial. All patients had suspected acute ST-elevation myocardial infarction and were about to undergo percutaneous transluminal coronary intervention (PCI). One group were given pexelizumab prior to PCI, and the other a placebo. The primary end point was mortality at 30 days, and secondary end points included death through 90 days, cardiogenic shock and congestive cardiac failure. No difference in mortality or the incidence of heart failure and cardiogenic shock was observed between the two groups.

JAMA 2007; 297: 43-51

I DON'T LIKE MONDAYS

Mondays are the most dangerous days to be at work, according to an Australian occupational health study. Researchers analysed injury data from the Australian Bureau of Statistics over a 20-year period and found that compensation claims were not evenly distributed throughout the working week. Most injuries occurred on Mondays, followed in decreasing order by the consecutive days of the week. More injuries were reported in the mornings than in the afternoons for every working day. The study supports the findings of international research showing similar trends in occupational injuries sustained over the course of the working week.

Aust N Z J Public Health 2006; 30: 505-508

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