IN OTHER JOURNALS

Heart biomarker

B-type natriuretic peptide — a 32-amino-acid polypeptide hormone secreted by cardiac ventricles — continues to show promise as a biomarker for heart disease, not only as a diagnostic tool when evaluating shortness of breath but also as an early warning signal in asymptomatic patients.[1-3]

...in diagnosis

The Swiss B-type Natriuretic Peptide for Acute Shortness of Breath Evaluation (BASEL) Study — a randomised controlled trial of 452 patients with acute dyspnoea — found that adding a single rapid bedside assay of B-type natriuretic peptide while the patient was in the ED led to shorter hospital stays (median, 8 days v 11 days) and reduced treatment costs.[2] In BASEL, the diagnosis of heart failure was considered unlikely if the peptide level was below 100 pg/mL and most likely if the level was more than 500 pg/mL; clinical judgement and further testing was recommended in patients with levels that fell between these values.

...in prognosis

Framingham Offspring Study investigators used a community-based cohort of over 3000 middle-aged persons without heart failure in determining that B-type natriuretic peptide levels above the 80th percentile are associated with an increased risk of heart failure, atrial fibrillation, stroke and death, but not coronary heart disease events.[3] The 80th percentile level in this cohort was 20.0 pg/mL for men and 23.3 pg/mL for women.

1. *N Engl J Med 2004; 350: 718-720*
2. *N Engl J Med 2004; 350: 647-654*
3. *N Engl J Med 2004; 350: 655-663*

Antibiotics and breast cancer: what's the link?

Inappropriate use of antibiotics is likely to fall as the word spreads that systemic antibiotic use has been linked to breast cancer. In a case–control study involving more than 10000 pre- and postmenopausal women in the US, the risk of breast cancer and death from breast cancer was greater with increasing cumulative days of antibiotic use and applied to all of the (most common) antibiotic classes studied. However, this study could not determine whether it is antibiotic use that causes cancer, or whether the study findings reflect other, underlying factors, such as indication for antibiotic use or overall weakened immune function.

JAMA 2004; 291: 827-835

Straining at stool?

Chronic constipation in patients with obstructed defecation may respond to biofeedback, according to Italian authors. In their clinical review, they said obstructed defecation, which occurs in about 7% of the adult population, usually results from a maladaptive, learned paradoxical contraction (or failed relaxation) of the puborectal muscle and external anal sphincter when straining at defecation. They say studies to date indicate that more than half of the patients with this condition treated with a variety of biofeedback techniques (including sensory training during simulated defecation, electromyography and manometry) have benefited. However, controlled studies are lacking in this area.

BMJ 2004; 328: 393-396

Tanapox nodule on right lateral calf. Copyright© 2004 Massachusetts Medical Society. All rights reserved.

"On" overnight: off form

Even a relatively benign night duty roster leads to some resident medical officers slowing down and slipping up when performing reaction-time tasks, according to South African researchers. They asked 33 anaesthetics residents to complete a battery of four reaction-time tasks on the mornings before and after a night on duty. The residents' working conditions seemed reasonable: the night duty followed an off-duty study day; they slept an average of 1 hour 40 minutes overnight; and they worked an average of 60 hours a week. However, the morning after night duty test performance with respect to either speed or accuracy had dropped by more than 15% (corresponding to a blood alcohol level of 0.05%) in about half of the study subjects — and especially for the more complex tasks.

Occup Environ Med 2004; 61: 167-170

Talking tanapox

In the USA, there is currently great concern about biological warfare in general and poxvirus infection in particular, and any suspicious causative agent requires prompt, accurate reporting. Accordingly, US authors report that a college student was recently infected with the poxvirus tanapox while caring for orphaned chimpanzees in the Republic of Congo.[1,2] The disease was diagnosed using electron microscopy and PCR testing of a tissue sample on her return to the States, but not before she had been managed in the Congo for a series of other presumed conditions such as malaria, abscess, and tick-borne illness. Tanapox is a zoonosis, characterised by a febrile prodrome and usually only one to two typical pock lesions on the extremities (Figure), which leads to self-limited disease with full recovery in immunocompetent humans. The disease is said to be extremely rare outside of Africa.

1. *N Engl J Med 2004; 350: 361-366*
2. *N Engl J Med 2004; 350: 324-327*

— Dr Ann Gregory, *MJA*