



Sleep inertia and cognition

The state of impaired cognition, grogginess, and disorientation commonly experienced on awakening from sleep has been referred to as sleep inertia. I guess we have all noticed this. Just how bad is it and does it matter? Research in the USA on nine healthy volunteers, who were on no medication and slept regularly for eight hours has been recently reported. Apparently, cognitive performance immediately on awakening from sleep was worse than performance at all subsequent points—on average 65% of the peak performance. It returned to normal within 20 minutes to 1 hour.

Physicians, truck drivers, pilots and others please take note.

JAMA 2006;295:163–4

Calcium, Vitamin D, and the risk of colorectal cancer and fractures

Millions of post-menopausal women regularly take calcium with vitamin D supplementation hoping that their osteoporosis and bone fracture risk will diminish. There is also the possible bonus of a reduced risk of colorectal cancer. Well, are these hopes realistic? Apparently not. Two reports from a large US study group, The Women's Health Initiative, have recently been published. 36,282 postmenopausal women, 50 to 79 years of age, were randomised to take either 1000 mg of calcium carbonate and 400 IU of Vitamin D or placebo. At 7 years there was no effect on the incidence of colorectal cancer and no reduction of hip fractures. There was a small reduction in osteoporosis measures, and an increase in the incidence of kidney stones.

N Engl J Med 2006;354:669–83 & 684–96

All you need to know about atrial fibrillation

Atrial fibrillation (AF) is the most common sustained cardiac arrhythmia, and contributes greatly to cardiovascular morbidity and mortality. In particular, its role in embolic stroke is well recognised. However, aspects of the management of atrial fibrillation remain controversial.

In an excellent recent paper the authors explore these controversies. They evaluate the evidence concerning the roles of rhythm and rate control, the definition of optimum rate control, the need for early cardioversion to prevent remodelling, the comparison of electrical with pharmacological cardioversion, and the selection of patients for long-term oral anticoagulation.

In addition, more recent topics such as the roles of novel long-term anticoagulation approaches and ablation therapy, and the potential usefulness of upstream therapy targeting substrate development are considered. This paper is a must-read for those interested in the management of AF. It is only one of four superb cardiology review articles published in the 4 January issues of *Lancet*.

Lancet 2006;367:262–72

Temporal artery biopsy

Temporal arteritis (TA), also known as giant-cell arteritis, is the most common primary vasculitis, and involves large-to-medium-sized vessels, especially the cranial branches of arteries arising from the aortic arch. A positive temporal artery biopsy is diagnostic (100% specificity), but the sensitivity of the biopsy is relatively low at 15-40%.

A report from Nottingham illustrates this point—in 31/37 patients there was no change in their clinical management despite a negative biopsy result: 18 continued with corticosteroids for >6 months with a clinical diagnosis of TA, and in 13 patients a decision to stop steroids, or an alternative diagnosis, was made before the biopsy result was known. Clinical judgement rules.

Bear in mind that the American College of Rheumatology recommends that 3 of 5 criteria are adequate for diagnosis—they are (i) age >50 years; (ii) new-onset localised headache; (iii) tenderness or decreased pulse of the temporal artery; (iv) erythrocyte sedimentation rate (ESR) >50 mm/h; (v) biopsy consistent with arteritis.

Q J Med 2006;99:33–6

Azathioprine and ulcerative colitis

The use of azathioprine for maintaining remission in Crohn's disease patients who are steroid dependent or resistant is supported by evidence from randomised controlled chemical trials.

But what about its use in ulcerative colitis—apparently debatable. In a recent trial in Italy, 72 patients with steroid dependent ulcerative colitis were randomised to receive azathioprine 2 mg/kg/day or oral 5-aminosalicylic acid (mesalazine) 3.2 g/day.

And the outcome? Significantly more patients in the azathioprine than in the 5-aminosalicylic acid group had clinical and endoscopic remission, and discontinued steroid therapy.

Gut 2006;55:47–53