CARPHOLOGY BY RAJENDRA

Antipsychotic drugs are often used to manage the behavioural and psychological symptoms of dementia. However, the UK Committee on Safety of Medicines issued a warning in March 2004 advising that the atypical antipsychotics - risperidone and olanzapine - should no longer be used for this indication because of an increased risk of ischaemic stroke. But now a population based retrospective cohort study of over 32000 older adults with dementia hasshowed no significant difference in risk of ischaemic stroke in those receiving atypical antipsychotics compared with those receiving typical antipsychotics. Thus the increased risk of stroke is not avoided by prescribing typical antipsychotics. *BMJ*, **330**, 445–8.

Interventions for hypoxic ischaemic encephalopathy at birth are usually disappointing. So it is not surprising that selective head cooling was not neuroprotective in a mixed population of infants with neonatal encephalopathy — the findings of a randomised trial on 234 term infants. However, there is cause for optimism because a predefined subgroup analysis suggests that it may be beneficial in infants who have less severe changes on amplitude integrated EEG.

Lancet, 365, 663-70.

Rectal artemether is as effective as intravenous quinine for the treatment of cerebral malaria and is well tolerated, finds a randomised controlled trial done on children in Uganda. Many deaths due to cerebral malaria occur outside hospital. Giving intravenous quinine, the conventional treatment, in rural settings is difficult if not impossible in developing countries. Thus having a drug that can be given rectally is an advance and should save lives.

BMJ, **330**, 334–6.

Premenopausal women have a lower risk of stroke than men of the same age, and the incidence of stroke in women increases rapidly after the menopause. This suggests that endogenous sex steroid hormones protect women against cerebrovascular events. So replacing the endogenous hormones after the menopause with hormone replacement therapy (HRT) should reduce the risk of stroke. Right? No, wrong. A meta-analysis of 28 trials looks at the association between HRT and subsequent stroke and finds that HRT is in fact associated with a significant increase in ischaemic stroke.

BMJ, 330, 342-5.

Twenty patients with refractory partial seizures had ECGs monitored for many months with implantable loop recorders. Four patients had bradycardia or periods of asystole and needed permanent pacemakers. Three of these 4 had potentially fatal asystole. This suggests that some patients at high risk of sudden unexplained death in epilepsy would need similar investigation



because centrally mediated cardiac arrhythmias are implicated in sudden unexplained death. *Lancet*, **364**, 2212–9.

Dietary supplements in addition to a normal hospital diet, do not benefit patients admitted to hospital after a stroke (and who are able to swallow). This is the finding of one of three large multicentre pragmatic trials involving over 4000 patients from 125 hospitals in 15 countries, of whom only 8% were undernourished at admission. The supplements used were mostly commercially available protein energy supplements. The simple lesson is "don't over nourish unless undernourished." *Lancet*, **365**, 755–63.

Many Cochrane reviews disappoint me because they usually find that trials are of poor quality and that there is no evidence for an intervention. The review of botulinum toxin A in blepharospasm is one such. The trials were of short duration, enrolled small numbers of patients, and had poor internal validity — among other flaws. The review, however, adds that all these trials found botulinum toxin A to be superior to placebo as did large case control and cohort studies, which reported that around 90% of patients benefited.

The Cochrane Database of Systematic Reviews (2004), Issue 2. Art No: CD004900.pub2.

Positron emission tomography was used to image blindfolded pianists performing a concerto by JS Bach, and this was compared to their brain activity while playing memorised major scales. Regions specifically supporting the concerto performance included superior and middle temporal cortex, planum polare, thalamus, basal ganglia, posterior cerebellum, dorsolateral premotor cortex, right insula, right supplementary motor area, lingual gyrus, and posterior cingulate. Areas specifically implicated in playing scales were posterior cingulate, middle temporal, right middle frontal, and right precuneus cortices. Now that you know the difference you can move on to playing Bach. *Neuropsychologia*, 43, 199–215.