CARPHOLOGY by Rajendra

Aspirin and cognition
Long-term use of low dose aspirin does not protect against cognitive decline in healthy and mostly white women aged 65 or more. This is the finding of a randomised, double-blind, placebo-controlled trial in which low dose aspirin was given to a subset of 6377 women participating in the Women’s health study. At the initial assessment (mean 5.6 years after randomisation) cognitive performance in the aspirin group was similar to that of the placebo group (mean difference in global score −0.01, 95% CI −0.04 to 0.02). According to the authors this trial does not support previous laboratory and epidemiological evidence that suggested that aspirin and other anti-inflammatory drugs may be protective against dementia.

BMJ 2007;334:397.

Herpes simplex encephalitis
Herpes simplex encephalitis continues to be associated with poor long-term outcomes despite treatment with intravenous aciclovir. This is the finding of a simple prospective register-based observational study of children done in Toronto, Canada. Of 322 children with acute encephalitis, 16 had herpes simplex encephalitis. Herpes simplex virus polymerase chain reaction studies done on cerebrospinal fluid were negative initially in two children but became positive when the test was repeated later. All patients were treated with intravenous aciclovir. Neurological sequelae occurred in 11 children, of whom seven had seizures and four had developmental delays. None of the children died.

Pediatrics 2007;119:e399–407

Giant cell arteritis
Patients with giant cell arteritis are dependent on glucocorticosteroids for their treatment and any new treatment that reduces this dependence is welcome. Unfortunately, infliximab, a monoclonal antibody against tumour necrosis factor, was found to be ineffective in a small placebo-controlled trial when it was given alone or along with steroids. The 44 patients in the study had newly diagnosed giant cell arteritis and were in a glucocorticoid-induced remission. The relapse rates did not differ significantly and the placebo-controlled trial was stopped early. The authors say that although the trial is too small to draw definitive conclusions, it provides evidence that using infliximab in these patients is unlikely to be of great benefit.


Malignant glioma
The prognosis for patients with malignant gliomas is poor so any intervention that improves survival without affecting quality of life or cognition is welcome. Radiotherapy resulted in a modest improvement in survival in patients aged 70 years and over with newly diagnosed glioblastoma, in a multicentre randomised controlled trial done on over 80 patients. At a median follow-up of 21 weeks, the median survival for the patients who received radiotherapy plus supportive care was 29.1 weeks, as compared with 16.9 weeks for the patients who received supportive care alone. The intervention did not reduce their quality of life or cognition. The trial was stopped early because of the favourable results.


Preventing venous thromboembolism
Enoxaparin is preferable to unfractionated heparin to prevent venous thromboembolism in patients with acute ischaemic stroke. This is the finding of an open-label randomised study involving over 1700 patients, which was sponsored by Sanofi-Aventis. The study used a composite endpoint consisting of symptomatic or asymptomatic deep venous thrombosis, symptomatic pulmonary embolism, or fatal pulmonary embolism. Primary safety endpoints were symptomatic intracranial haemorrhage, major extracranial haemorrhage, and all-cause mortality. Enoxaparin reduced the risk of venous thromboembolism by 43% compared with unfractionated heparin while the occurrence of any bleeding was similar in the two groups.


New poliomyelitis virus
The newer high potency monovalent oral type 1 poliovirus vaccine (mOPV1) is three times more effective than the conventional trivalent oral polio vaccine, according to a study done under field conditions in India. Poliomyelitis persists in some parts of the world including parts of India and eradicating the illness has proved challenging. Researchers tested the protective efficacy of mOPV1 and of the conventional vaccine in a case-control study involving over 3000 matched case-control pairs of confirmed cases of poliomyelitis caused by type 1 wild poliovirus and cases of non-polio acute flaccid paralysis in India. The authors say that achieving high coverage with this new vaccine in areas of persistent poliovirus transmission should substantially improve the probability of rapidly eliminating transmission of the disease.


Eradicating or controlling polio?
An economic analysis in the same issue of the Lancet argues that although eradication of poliomyelitis is very expensive it is the much preferred option to a seemingly low-cost policy aimed at controlling poliomyelitis that goes on for several years. The authors base their arguments on a dynamic model based on endemic areas in India. The analysts say that the world should complete eradication now. The other option, of controlling the number of cases, will cost more in terms of money and number of cases. And there is also the risk that we may not have another chance to eradicate poliomyelitis.