



# CARPHOLOGY by Rajendra

A simple retrospective chart review in a single institution looked at the frequency of seizures in children with low grade tumours and the seizure outcome after lesionectomy. Of 280 children with low grade tumours, 55 (20%) had seizures. Of the 27 children with cortical tumours whose seizures began before the tumour was diagnosed, 23 had complete resection. About half of these 23 had no further seizures. Seizures were controlled in 84% of the 55 children at follow up (median 4.5 years after first seizure (1–17.4 years). A pericavity hyperintense signal on T2 weighted magnetic resonance imaging and the occurrence of at least 10 seizures before treatment for seizures were associated with uncontrolled seizures. Lesionectomy may be appropriate in children with low grade brain tumours, say the authors.

*J Neurosurg* 2006;**104**(Suppl 6):377–82.

A large prospective study from Korea involving nearly 800,000 civil servants found an association between haemorrhagic stroke and low blood cholesterol, among other objectives, but only in participants with hypertension, suggesting that hypertension may modify the effects of low cholesterol. According to the authors, low blood cholesterol may not in itself increase risk of haemorrhagic stroke. They recommend that in countries with high rates of haemorrhagic stroke, preventive strategies that include lowering blood cholesterol should not be tempered because of concerns about a possible increased risk of haemorrhagic stroke.

*BMJ* doi:10.1136/bmj.38855.610324.80 (6 June 2006)

In carpal tunnel syndrome, endoscopic surgery was associated with less postoperative pain than open surgery, but the difference—though significant—was small, finds a randomised controlled trial done on 128 patients. Pain in the scar or palm was reported by 33 patients (52%) in the

endoscopic group and 53 patients (82%) in the open group at three months. The median length of absence from work after surgery was 28 days in both groups and the functional status after surgery, and relief of symptoms of carpal tunnel syndrome, were similar in the two groups. The authors question the cost effectiveness of endoscopic surgery given the small benefit from it.

*BMJ* 2006;**332**:1473–6.

Stereotactic radiosurgery plus whole-brain radiation therapy was compared with stereotactic radiosurgery alone in a randomised controlled trial of 132 patients with 1–4 brain metastases, each less than 3 cm in diameter. Adding whole brain radiation did not improve survival, but intracranial relapse occurred considerably less frequently in those who received it. As a result salvage treatment was needed less frequently in these patients.

*JAMA* 2006;**295**:2483–91.

In an open randomised trial in a paediatric emergency department of a tertiary hospital in Malawi, 160 children aged over 2 months with seizures persisting for more than five minutes were given either intranasal lorazepam or intramuscular paraldehyde. Intranasal lorazepam stopped convulsions within 10 minutes in 60 (75%) episodes treated (95% CI 64 to 84%), and intramuscular paraldehyde in 49 (61%) (95% CI 49 to 72%). Clinically important cardiorespiratory events were not seen in either group. The authors conclude that intranasal lorazepam is effective, safe, and provides a less invasive alternative to intramuscular paraldehyde.

*Lancet* 2006;**367**:1591–7.

Radiosurgery is a safe and effective treatment for trigeminal neuralgia and is associated with a particularly low rate of hyperaesthesia, say the authors of a large

case series of 100 patients. They used gamma knife surgery to the retrogasserian cisternal portion of the fifth cranial nerve in patients with trigeminal neuralgia. They report that 83 of the 100 patients were pain free when last seen. Fifty eight of these 83 patients had stopped taking medication during the study. Six patients reported mild facial paraesthesia and four reported mild hyperaesthesia.

*J Neurosurg* 2006;**104**:913–24.

Acute postoperative seizures occur in a quarter of children, and the risk is higher after extratemporal cortical resection than hemispherectomy, finds a retrospective study of 132 children undergoing surgery for intractable seizures. The study also finds that acute postoperative seizures predict a poor postoperative seizure outcome at 6, 12, and 24 months. The authors conclude that their findings suggest that acute postoperative seizures should not be discounted as "benign" in research studies that evaluate seizure outcomes after epilepsy surgery.

*Neurology* 2006;**66**:1038–43.

A systematic review investigates the clinical effectiveness of treatment with hyperbaric oxygen for neonates with hypoxic-ischaemic encephalopathy. This treatment is frequently used in China but much less often in the West. The investigators found 20 trials, mainly from Chinese sources, but the quality of the reporting was poor by CONSORT standards. Treatment with hyperbaric oxygen had better outcomes than the comparator in almost all trials; odds ratio 0.26 (95% CI 0.14 to 0.46) for mortality and 0.41 (0.27 to 0.61) for neurological sequelae. The authors stress the need for an adequately powered, high quality randomised controlled trial to confirm these findings and point out that the Chinese medical literature may be a rich source of evidence to inform clinical practice and other systematic reviews.

*BMJ* doi:10.1136/bmj.38776.731655.2F (11 May 2006)