

CARPHOLOGY by A Fo Ben



Pract Neurol 2010; 10: 186

Once more unto the breach...

Breech presentation complicates 3–4% of deliveries—potentially prolonging and complicating labour—but does it increase the risk of cerebral palsy? A Norwegian study confirms a significantly increased risk of cerebral palsy compared with term vertex presenting infants (relative risk 2.98). There are potential confounders, however: for example, birth defects are three times more common in breech deliveries. The accompanying editorial observes that vaginal breech deliveries have fallen from over 20% (1996) to only 10% (2005) following the 'Term Breech Trial' but with consequent de-skilling of the obstetric workforce. Nowadays, only the most experienced obstetricians should manage mothers presenting in breech but too late for caesarean delivery.

Dev Med Child Neurol 2009;51:860–5.

CSF biomarkers in Alzheimer's disease

Can we predict progression from mild cognitive impairment (MCI) to Alzheimer's disease? A multicentre international consortium assessed 750 people with MCI, 529 with Alzheimer's and 304 controls: those developing Alzheimer's had lower A β 42 and higher P- τ and T- τ levels in CSF. Unfortunately, the assays varied between sites, in part reducing the tests' utility: the positive predictive value was 62% and the negative predictive value was 88%. Until we have therapies to halt cognitive decline, these biomarkers can only remain a research tool.

JAMA 2009;302:385–93.

Cervical radiculopathy: rest is history?

Painful cervical radiculopathy is common and costly, and managed largely without evidence. A recent randomised controlled trial has only muddied the water further. Patients with recent onset (<1 month) cervical radiculopathy (n=205) were randomised three ways, to 6 weeks of treatment with: semi-hard collar and rest; twice weekly

physiotherapy; or continuation of normal activities (control). All groups improved but faster in the two treatment groups. Thus very different approaches (immobilisation by collar vs mobilisation by exercises) were equally beneficial. The accompanying editorial suggests that although collars are cheaper, mobilisation gives a positive message to the patient and might avoid chronic pain; however, with honours even, the patient can decide.

BMJ 2009;339:952–4.

Beyond the human genome

If completion of the human genome project was the decade's greatest scientific advance, will the complete genomes of the cucumber (*Cucumis sativus*)¹ and giant panda (*Ailuropoda melanoleuca*)² have the same impact? A Fo Ben suspects that the International Cancer Genome Consortium's identification of separate genomic sequences of a small cell lung cancer, a malignant melanoma and a lymphoblastoid cell line from the same person have the potential for greatest impact.^{3,4} Specifically for neurologists, German scientists are working on medulloblastoma and Americans on glioblastoma multiforme. This is truly an exciting time for ambitious international collaborative science.

1. doi:10.1038/nature08696; 2. *Nat Genet* 2009;41:1275–81; 3. doi:10.1038/nature08658; 4. doi:10.1038/nature08629

Rain Man

Kim Peek (1951–2009), the inspiration for Dustin Hoffman's 1988 Oscar winning *Rain Man*, was medically dismissed in infancy yet was reading and memorising books by 2 years of age. Allegedly, his absent corpus callosum allowed him to read two pages at once (in 10 s), independently and simultaneously using right and left visual fields. He knew word for word 12 000 books, including the Bible, Shakespeare's plays and phone directories. Yet he lacked simple motor skills, including buttoning shirts and walking upstairs, and relied on

his father for many activities of daily living. *Rain Man* depicted an autistic savant with superb recall but little understanding. Its success propelled Peek to world fame, with audiences clamouring to hear the (later named) 'Living Google' answer questions and rattle off lists of dates and names without notes. In later life he showed some ability to interpret facts as well as memorising them, and even some sense of humour.

The Guardian, 23 December 2009;7.

Complementary medicine: traditional trial

Among the common alternative therapies taken to prevent cognitive decline, *Ginkgo biloba* extract is one of the more common. However, the lack of evidence of efficacy for many herbal remedies is perpetuated by too few adequately designed and powered trials. So a randomised, double blind, placebo controlled trial of 3069 people aged over 72 years in the community should make compelling reading. Sadly, there was no effect on global or domain specific cognitive decline in older adults, despite comparing various subgroups (age, sex, race, education, *APOE*E4* allele or baseline mild cognitive impairment). It appears *Ginkgo biloba* will remain 'alternative' (proven not to work) rather than join the ranks of 'traditional' medicines (effective).

JAMA 2009;302:2663–70.

Sniff yourself smarter

A Fo Ben discovered this hidden gem watching QI (BBC1). While investigating yoga breathing techniques, visuospatial memory scores were found to increase after left nostril breathing compared with pretest levels (16%, p=0.03). The theory is that unilateral nasal breathing uses the contralateral cerebral hemisphere preferentially. So, yogic breathing before a driving test? Not to be sniffed at.

Indian J Physiol Pharmacol 2008;52:197–200.