# CARPHOLOGY by Rajendra



Pract Neurol 2008: 8: 204

#### Drug treatment of dementia

Treatment of dementia with cholinesterase inhibitors (donepezil, galantamine, rivastigmine, tacrine) and memantine can result in statistically significant but clinically only marginal improvement in measures of cognition and global assessment of dementia. This is the conclusion reached in the guideline developed by the American College of Physicians and American Academy of Family Physicians, based on a review of 59 trials. However, these trials had several limitations such as short duration, inclusion of only patients with mild to moderate Alzheimer's disease, poor reporting of adverse events, lack of clear definitions for statistical significance, limited evaluation of behaviour and qualityof-life outcomes, and few direct comparison of different treatments.

Ann Intern Med 2008;148:370-8.

#### Survival after stroke

Functional status six months after an ischaemic stroke is associated with longterm survival. This is the finding of a prospective study based on three cohorts with a total of 7710 patients registered between 1981 and 2000 and followed up for a maximum of 19 years. Among patients who survived to assessment six months after the index stroke, the subsequent median survival among those independent in daily living and those dependent was 9.7 years (95% CI 8.9 to 10.6) and 6.0 years (5.7 to 6.4), respectively. A combined analysis of two of the cohorts showed that subsequent median survival fell progressively from 12.9 years (10.0 to 15.9) for patients with a Rankin score of 0-1 at six months after the stroke to 2.5 years (1.4 to 3.5) for patients with a Rankin score of 5. The authors say that early interventions that reduce dependency at six months might have positive effects on long-term survival.

BMJ 2008:336:376-9.

#### Antibiotic use in dementia

Nursing home residents with advanced dementia near the end of life are often given antibiotics. We now have a study that tells us how prevalent the practice is. A cohort of 214 residents with advanced dementia from 21 nursing homes in the Boston area was followed up prospectively for 18 months or until death. During an average of 322 days, 142 residents (66%) got at least one course of antimicrobial therapy and the mean number of courses per resident was four. Among 99 people who died, 42 had received antimicrobials during the two weeks before death, of which 30 of 72 courses (42%) had been given parenterally. A respiratory tract infection was the most common indication (47%). And did all these antibiotics make the patients more comfortable? We don't know.

Arch Intern Med 2008;168:357-62.

### Febrile status epilepticus

MRI findings of a markedly hyperintense hippocampus in children with febrile status epilepticus is associated with subsequent mesial temporal sclerosis. This is the finding of a small study of 11 children (mean age 25 months) who underwent initial MRI that included coronal temporal lobe imaging within 72 hours of febrile status epilepticus and follow-up imaging 3-23 months later (mean 9 months). Four children had at least one hippocampus with moderate or marked signal abnormality, three children had a hippocampus with mild or minimal abnormality, and four children had normal signal intensity. Five children (two with temporal lobe epilepsy and two with complex partial seizures) had hippocampal volume loss and increased signal intensity on follow-up imaging, meeting the imaging criteria for mesial temporal sclerosis.

Am J Roentgenol 2008;190:976-83.

# Survival times in people with dementia

A population based study finds that the estimated median survival for incident dementia is 4.5 years. Researchers looked at a cohort, followed up for 14 years. A total of 356 of the 438 (81%) participants who developed dementia during the study had died. Estimated median survival from onset of dementia to death was 4.1 years (interguartile range 2.5-7.6) for men and 4.6 years (2.9-7.0) for women. There was a difference of nearly seven years in survival between the younger old and the oldest people with dementia: 10.7 for ages 65-69; 5.4 for ages 70-79; 4.3 for ages 80-89, and 3.8 years for ages 90. Factors that predicted mortality in the presence of dementia during the follow up included sex, age of onset, and disability. Such estimates can be used for prognosis and planning for patients, carers, service providers and policy makers, say the authors.

BMJ 2008;**336**:258-62.

## **Preventing leprosy**

A single dose of rifampicin given to contacts of patients with newly diagnosed leprosy prevents the development of clinical leprosy at two years. This is the finding of a double blind, cluster randomised, placebo controlled trial done in two districts of northwest Bangladesh. A total of 18 869 of the 21 711 contacts (89%) were followed up at four years. Ninety one of 9452 contacts in the placebo group and 59 of 9417 in the rifampicin group had developed leprosy. The overall relative reduction in incidence of leprosy using a single dose of rifampicin in the first two years was 57% (95% CI 33% to 72%). The groups did not differ between two and four years. The number-needed-to-treat to prevent a single case of leprosy among contacts was 297.

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