Ganciclovir prevents CMV disease after renal transplantation

Administration of oral ganciclovir following renal transplantation appears to prevent the development of cytomegalovirus (CMV) infection and disease, according to data presented at the annual meeting of the American Society of Transplant Physicians, which was held in Chicago, US, this month.

At the meeting, Dr Daniel Brennan, director of Transplant Nephrology at Washington University School of Medicine (and principal study investigator) presented the findings of a study that involved 42 renal transplant recipients. After transplantation, the patients were randomised to receive either prophylaxis with oral ganciclovir ['Cytovene'] 1000mg three times daily for 12 weeks or deferred therapy. IV ganciclovir 5 mg/kg every 12 hours for 3 weeks was administered to patients if they developed symptomatic CMV viraemia. All 42 patients were either CMV seropositive and/or had received a kidney from a CMV seropositive donor.

A 6 months, the incidence of CMV disease was 21% among oral ganciclovir recipients compared with 61% among patients in the deferred therapy group. Furthermore, the mean time to development of CMV disease was 133 days in oral ganciclovir recipients compared with 31 days among patients in the deferred therapy group. Importantly, none of the ganciclovir recipients developed CMV disease during the 12 weeks of prophylactic therapy.

'Transplant physicians now have data that demonstrates oral ganciclovir is a good option for preventing CMV disease in kidney as well as liver transplant recipients', said Dr Brennan.

Hoffman-La Roche. Life threatening CMV disease may be prevented in kidney transplant recipients with oral Cytovene. Media Release: [3 pages], 11 May 1997

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Otitis media: only modest benefit with early antibacterial use

A meta-analysis of 6 placebo-controlled trials of antibacterial treatment for children with otitis media was conducted by investigators in Australia who evaluated the resolution of symptoms and the most commonly reported serious complications of otitis media as primary endpoints.

The meta-analysis revealed that about 60% of children with otitis media who received placebo were pain free 24 hours after presentation, and that early use of antibacterials reduced the risk of pain by 41% in the remaining children. This is equivalent to an absolute benefit of 5.6% fewer children experiencing pain by 2 to 7 days after presentation.

Use of antibacterials also reduced the risk of developing contralateral acute otitis media by 43%. However, the risk of experiencing adverse effects such as vomiting, diarrhoea and rashes was nearly doubled with antibacterial use, compared with placebo. Antibacterial use appeared to have little effect on the risk of deafness.

Del Mar C, Glasziou P, Hayem M. Are antibiotics indicated as initial treatment for children with acute otitis media? A meta-analysis. British Medical Journal 314: 1526-1529, 24 May 1997

Iron therapy effective in breath-holding spells

Iron therapy is effective in the treatment of breath-holding spells in children, report researchers from Jordan.¹

In this study, children with breath-holding spells received an oral solution of ferrous sulfate 5 mg/kg/day (n = 33), or placebo (34), for 16 weeks.

Significant difference in response rate

Significantly more ferrous sulfate, compared with placebo, recipients experienced a complete or partial response* to therapy [see table].

Response rate (percentage of patients) among children with breath-holding spells

	Ferrous sulfate recipients	Placebo recipients
Complete response	51.5*	0
Partial response	36.4*	5.9
No response or minimal response	12.1*	94.1

The baseline mean haemoglobin level was significantly lower among the children who achieved a favourable response compared with those children who responded poorly.

Dr David Hannon from the East Carolina University School of Medicine, US, notes that the authors of the above study 'are to be congratulated for having performed a study that any large pediatric practice could have performed during the past three decades'.²

Aggravated by iron deficiency?

Dr Hannon believes that many breath holders have an infantile variant of vasovagal or neurocardiogenic syncope that is often familial and that will resolve spontaneously. He comments that 'iron deficiency may aggravate this tendency or possibly cause it in cases where there is not an underlying genetic substrate'. He adds that while in the past physicians have only been able to give reassurance about the benign nature of breath holding, the results of this study mean that physicians now have more to offer their patients when appropriate.

- *A complete response was defined as a reduction in the number of breath-holding spells per month to 0, a partial response was defined as $a \ge 50\%$ reduction in the frequency of attacks, and a minimal response was defined as a reduction in the frequency of attacks to < 50%.
- 1. Daoud AS, et al. Effectiveness of iron therapy on breath-holding spells. Journal of Pediatrics 130: 547-550, Apr 1997 2. Hannon DW. Breath-holding spells: waiting to inhale, waiting for systole, or waiting for iron therapy? Journal of Pediatrics 130: 510-512, Apr 1997

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