

 **Two days of dexamethasone versus 5 days of prednisone in the treatment of acute asthma.** (*Ann Emerg Med.* 2011; 58: 200-4)

This randomized controlled trial compared the time needed to return to normal activity and the frequency of relapse after acute exacerbation of asthma in adults (18-45y) receiving either 5 days of prednisone (50 mg daily) ( $n=96$ ) or 2 days of dexamethasone (16 mg daily) ( $n=104$ ). Return to normal activities within 3 days was 90% in dexamethasone group compared with 80% in the prednisone group ( $P=.049$ ). Relapse was similar between groups (13% versus 11%;  $P=.67$ ).

**COMMENT** The study while done in adults discusses an important issue faced by pediatrician. A 2 day course of dexamethasone would not only increase compliance, but may produce also have the benefit of producing less growth suppression in the pediatric population.

 **Experience with levetiracetam for childhood refractory epilepsy.** (*Arch Pediatr.* 2012;19:3-8).

This retrospective study was conducted to evaluate the efficacy of levetiracetam as an adjuvant therapy in a population of 42 children (mean age 10.8 y; range 2.1-19 y) presenting with drug-resistant epilepsy (mean duration 6.6 y; range 1.5-19 y), over a 5-year-period. After the administration of levetiracetam, 10 patients (23.8%) became seizure-free and 16 (38.1%) had more than 50% seizure reduction. A reduction of less than 50% was observed in 13 patients (31%). Three patients (7.1%) had an increase in seizure frequency. The effectiveness of levetiracetam was similar in partial and generalized epilepsy. Levetiracetam was well tolerated. This study confirmed the effectiveness and tolerance of levetiracetam used as an adjuvant therapy in children presenting with drug-resistant epilepsy.

 **Prophylactic nevirapine to prevent mother-to-child HIV transmission can be safely extended.** (*Lancet, Early Online Publication, 23 December 2011*).

Nevirapine given once-daily for the first 6, 14, or 28 weeks of life to infants exposed to HIV-1 via breastfeeding reduces transmission through this route compared with single-dose nevirapine at birth or in neonatal period. In this phase 3, randomized, double-blind, placebo-controlled HPTN 046 trial, the authors assessed the incremental benefit of extension of once-daily infant nevirapine from age 6 weeks to 6 months. They enrolled breastfeeding infants born to mothers with HIV-1 in

four African countries within 7 days of birth. Following receipt of nevirapine from birth to 6 weeks, infants without HIV infection were randomly allocated to receive extended nevirapine prophylaxis ( $n=762$ ) or placebo ( $n=765$ ) until 6 months or until breastfeeding cessation, whichever was earlier. The primary efficacy endpoint was HIV-1 infection in infants at 6 months and safety endpoints were adverse reactions in both groups. In Kaplan-Meier analysis, 1.1% (95% CI 0.3-1.8) of infants who received extended nevirapine developed HIV-1 between 6 weeks and 6 months compared with 2.4% (1.3-3.6) of controls (difference 1.3%, 95% CI 0-2.6), equating to a 54% reduction in transmission ( $P=0.049$ ). However, mortality (1.2% for nevirapine vs 1.1% for placebo;  $P=0.81$ ) and combined HIV infection and mortality rates (2.3% vs 3.2%;  $P=0.27$ ) did not differ between groups at 6 months. The frequency of adverse events, serious adverse events, and deaths did not differ significantly between treatment groups. Nevirapine prophylaxis can safely be used to provide protection from mother-to-child transmission of HIV-1 via breastfeeding for infants up to 6 months of age, and may further reduce risk of HIV transmission.

 **H. Pylori in colorectal polyps now!** (*Pediatr Infect Dis J.* 2011 Dec 20).

Seroprevalence of *Helicobacter pylori* was ascertained in 35 children, who had undergone polypectomy for colorectal polyps. Another 27 children with gastrointestinal symptoms and normal colonoscopy served as controls. *H. pylori* infection was diagnosed if the serum urease antibody was positive. The *H. pylori* positive rate in children with colorectal polyps was 57.1% (20/35) compared to 22.2% (6/27) in the control group ( $P<0.01$ ). Age, gender, and the number, size and locations of the colonic polyps were not significantly different between children with *H. pylori* positive and negative polyps. The *H. pylori* antibody-positive rate was 65.0% (13/20) in the patients with *H. pylori* infection-positive colorectal polyps, which was higher than the rate of 26.7% (4/15) for the patients with *H. pylori* infection-negative colorectal polyps ( $P<0.05$ ). These findings suggest a positive association between *H. pylori* infection and colorectal polyps in children.

**COMMENT** The theory of bacteria as a cause of disease has come a full circle. From being derided as a cause of disease in the 19<sup>th</sup> century, to being accepted as a cause of infectious diseases, and now as a part of many chronic “non-infectious disease”.

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