Neonatal vitamin A supplementation – does it help? (*BMJ. 2009 Mar 27;338:b919*).

A systematic review, meta-analysis, and metaregression of randomized controlled trials to evaluate the effect of neonatal vitamin A supplementation on infant mortality, morbidity and early adverse effect was conducted. It included 6 trials from developing countries. There was no convincing evidence of a reduced risk of mortality during infancy or of an increase in early adverse effects including bulging fontanelle. Limited data did not indicate a reduced risk of mortality during the neonatal period, cause specific mortality, common morbidities (diarrhea and others), and admission to hospital. There was, however, evidence of an increased risk of acute respiratory infection and a reduced risk of clinic visits.

COMMENT There is no convincing evidence of a reduced risk of mortality and possibly morbidity or of increased early adverse effects after neonatal supplementation with vitamin A. There is thus no justification for initiating such supplementation as a public health intervention in developing countries for reducing infant mortality and morbidity.

Iron deficiency and the vision of a growing child (*Brain Dev 2009 Mar 25*).

Iron plays an important role in the synthesis of neurotransmitters and myelination of nerves. Visual evoked potentials (VEP) were assessed in iron replete and iron deplete children (n=25 in each group; age 6-24 mo). In both eyes each of the three waves (N1, P1 and N2) of the flash VEP showed longer latencies (P<0.05) in the anemic group compared to control; there was a negative correlation between the severity of iron deficiency and latencies of waves of VEP.

COMMENT While we are all aware of a large number of adverse effects of iron deficiency, its effect on the growing eyes suggests supplementation with iron

during this vulnerable time should be accorded high priority.

Lactobacillus GG supplementation and eradication of *Helicobacter pylori* (*J Pediatr Gastroenterol Nutr* 2009; 48: 431-436).

A double-blind, placebo-controlled, randomized trial comparing a 7-day, triple eradication regimen consisting of 2 antibiotics (amoxicillin 25 mg/kg bid, and clarithromycin 10 mg/kg bid) plus a proton pump inhibitor (omeprazole 0.5 mg/kg bid), supplemented with Lactobacillus GG (LGG) or placebo in 83 children with *H. pylori* infection, confirmed by 2 of 3 tests (13C-urea breath test, histopathology, rapid urease test). Of the 34 children in the LGG group, 23 (69%) experienced eradication, compared with 22 of 32 children (68%) in the placebo group.

COMMENT The study suggests that addition of LGG to the standard therapy does not improve the eradication rate of *H. pylori*.

Vitamin D supplementation and chronic kidney disease (*Pediatrics 2009; 123: 791-796*)

Researchers first measured levels of 25-hydroxyvitamin D in 1,074 children with chronic kidney disease (stages 1-5) over a 10-year period (1987-1996). The prevalence of vitamin D deficiency (level <15 ng/mL) ranged from 20% in 1988 to 75% in 1995 and increased significantly over time. In addition, mean levels of vitamin D decreased significantly over time. Levels also varied significantly by season, with higher values observed in summer and fall as compared with winter and spring.

COMMENT Vitamin D supplementation is an oft forgotten, simple yet effective measure that can reduce the morbidity in children with chronic kidney disease.

Gaurav Gupta

drgaurav@charakclinics.com