

Clippings

□ For women who have given birth, the risk of breast cancer is directly associated with the weight of the placenta in two consecutive pregnancies. The findings are based on a study of 314,019 women who were logged in the Sweden Birth Registry. The hazard ratio for developing breast cancer was 1.85 for women with placental weights between 500 and 699 g for one pregnancy and at least 700 g for the other, compared with those who had two consecutive pregnancies with placentas weighing less than 500 g. For women with placental weights of at least 700 g for both pregnancies, the hazard ratio was 2.05. These results further support the hypothesis that pregnancy hormones are important modifiers of subsequent maternal breast cancer risk. *JAMA* 2005; 294: 2474.

□ A new malaria vaccine that may work! The reported results are from the single-blind follow-up phase of a randomized, double-blind, controlled proof of concept study in children one to four years of age. The RTS/AS02A vaccine candidate uses a recombinant protein that fuses a part of the *Plasmodium falciparum* circumsporozoite protein with the hepatitis B surface antigen and targets immune responses against the stage injected by mosquitoes. Fourteen hundred forty-two children who had received a three-dose regimen of the vaccine in 2003 were followed for continued assessment of safety, immunogenicity, and efficacy. For the 18-month period of follow-up, RTS,S/AS02A was shown to reduce clinical malaria episodes by 35 percent and severe malaria episodes by 49 percent. Several more years of clinical investigation will be needed before this vaccine is ready for licensure and implementation. *Lancet* 2005 (November, online edition)

□ While it is the usual protocol to withhold oral medicines in patient with subacute obstruction, quicker resolution of obstruction of the intestines and a shorter hospital stay can be achieved when conservative treatment includes oral therapy of a laxative, a digestant, and a defoaming agent. Compared with patients in the control group, patients receiving oral therapy were more likely to have successful treatment without surgery (91% vs 76%). They also had shorter lengths of stay in the hospital. Follow-up of all patients showed no longer-term adverse events had resulted from the new management strategy. This study has important implications for clinical practice. Although further studies are needed to confirm and further explore these findings, clinicians and surgeons can apply the results to the management of similar patients and can expect to see shorter hospital stays and fewer patients requiring surgery. *CMAJ* 2005; 173: 1165

□ The exclusion of allergenic foods from the mother's diet reduces the duration of distressed behavior in breast-fed infants with colic. A study of 90 exclusively breast-fed infants with colic who were 2.9 to 8.6 weeks old. Half the dyads were randomly assigned to the control arm, in which the mother consumed her usual diet. In the intervention group the mother excluded cow's milk, eggs, peanuts, tree nuts, wheat, soy, and fish from her diet. Cry/fuss duration (as measured over 48 hours) was assessed at baseline and after 7 days of the diet. The primary end point was a reduction in cry/fuss duration of =25% from baseline. At the follow-up assessment, significantly more infants had a greater decrease in cry/fuss duration per 48 hours in the intervention group compared with the controls. These data support

previous suggestions that hypersensitivity to food proteins may contribute to colic among breast-fed infants. *Pediatrics*. 2005; 116: e709.

□ Use of a 70%/30% helium and oxygen mixture (heliox) to drive continuous aerosol delivery of albuterol improves control of moderate to severe asthma exacerbations compared with 100% oxygen-driven delivery. In a study involving 30 children 2 to 18 years old, all patients were treated initially with nebulized albuterol (5 mg) driven by 100% oxygen and oral prednisone or prednisolone. Then patients were randomly assigned to receive continuously nebulized albuterol (15 mg/h) delivered by either heliox or oxygen via a nonrebreathing face mask.

Compared with baseline, the mean change in PI score was significantly greater in the heliox group than in the oxygen group. Furthermore, 11 patients (73%) in the heliox group were discharged from the hospital in <12 hours, compared with only 5 patients (33%) in the oxygen group. Although these results require confirmation, they suggest heliox may play an important role as adjunct therapy for children with moderate to severe exacerbations of asthma. *Pediatrics* 2005; 116: 1127.

□ To assess the efficacy of systemic fluconazole griseofulvin for treating *Tinea capitis* the following study was undertaken. This study involved 721 children with tinea capitis. Groups 1 and 2 received fluconazole (6 mg/kg/d) either for 3 weeks followed by 3 weeks of placebo (group 1) or for the entire 6-week study (group 2). Group 3 received standard-dose griseofulvin (100 mg/kg/d) for 6 weeks. At the end of treatment, mycological cure rates were 44.5% in group 1, 49.6% in group 2, and 52.2% in group 3. These between-group differences were not significant, nor did mycologic or clinical cure rates differ significantly between groups 2 and 3 at any time

during the study. Adverse events profiles were also similar in the three groups. Thus, although fluconazole is not a marked improvement over griseofulvin for treating pediatric tinea capitis, it does increase treatment options for children with contraindications to or intolerance of high-dose griseofulvin. Clearly, more effective treatments for tinea capitis are needed. *J Am Acad Dermatol*. 2005; 53: 798.

□ Of children with sore throat, 15% to 36% have pharyngitis caused by group A beta-hemolytic streptococci (GABHS). Performance of a GABHS test prior to antibiotic prescribing is recommended for children with sore throat. Has GABHS testing actually reduced the antibiotic prescriptions in the US? Analysis of visits by children aged 3 to 17 years with sore throat to office-based physicians, hospital outpatient departments, and emergency departments between 1995 to 2003 (N = 4158) and of a subset of visits with GABHS testing data (n = 2797) was done. Physicians prescribed antibiotics to 53% of children with sore throat, in excess of the maximum expected prevalence of GABHS. Although there was a decrease in the proportion of children receiving antibiotics between 1995 and 2003, this was due to decreased prescribing of agents recommended for GABHS. Although GABHS testing was associated with a lower rate of antibiotic prescribing for children with diagnosis codes of pharyngitis, tonsillitis, and streptococcal sore throat, GABHS testing was underused. *JAMA*. 2005; 294: 2315.

□ With the obesity epidemic firmly amongst us, there is a lot of interest in finding out the infant growth predictors for adult obesity. This systematic review of 24 studies meeting the inclusion criteria (22 cohort and two case-control studies) showed the following results. Infants who are at the highest end of the distribution for weight or body mass index or who grow rapidly during infancy are at

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increased risk of subsequent obesity. *BMJ* 2005; 331: 929.

□ Currently, there is no effective intervention for a primary cytomegalovirus (CMV) infection during pregnancy. The authors studied pregnant women with a primary CMV infection. The therapy group (N = 31) comprised women whose amniotic fluid contained either CMV or CMV DNA and who were offered intravenous CMV hyperimmune globulin at a dose of 200 U per kilogram of maternal weight. A prevention group, consisting of women (N = 37) with a recent primary infection before 21 weeks' gestation or who declined amniocentesis, was offered monthly hyperimmune globulin (100 U per kilogram intravenously). In the therapy group, only 1

(3 percent) women gave birth to an infant with CMV disease, as compared with 7 of 14 women who did not receive hyperimmune globulin (50 percent). In the prevention group, 6 (16 percent) women had infants with congenital CMV infection, as compared with 19 (40 percent) who did not receive hyperimmune globulin. Thus the study concludes that treatment of pregnant women with CMV-specific hyperimmune globulin is safe, and it may be effective in the treatment and prevention of congenital CMV infection. *N Engl J Med* 2005; 353: 1350.

Gaurav Gupta,
Consultant Pediatrician,
Charak Clinics,
Chandigarh, India
E-mail: gauravg@sify.com