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## *Clippings*

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- Does the first febrile seizure caused by HHV-6 have an increased risk for recurrent seizures when compared to children having first febrile seizure attributed to other illnesses? In a recent study (*Pediatr Infect Dis J* 1998; 17: 43-48) no appreciable difference was documented in the type of seizures in the prognosis in two groups. There was however a suggestion that a febrile seizure associated with HHV-6 infection might be associated with a reduced risk of recurrent seizures indicating the need for a long-term prospective study.
- To document the use of twenty-four hour ambulatory blood pressure monitoring (ABPM) in young children, authors (*Pediatr Nephrol* 1997; 11: 707-710) evaluated use in 61 healthy children and 40 children with renal diseases and/or hypertension. The mean ( $\pm$ SD) systolic and diastolic pressures of healthy 3-6 year old children were 110 $\pm$ 5 mm Hg and 67 $\pm$ 5 mm Hg during the daytime and 100 $\pm$ 5 mm Hg over 58 $\pm$ 5 mm Hg at night. In addition to the nocturnal decrease in blood pressure, ambulatory monitoring detected a second dip in the daytime during bed rest after lunch.
- Authors (*Pediatrics* 1997; 131: 801-808) have recently reviewed the appropriate diarrhea management through continued feeding. While oral rehydration therapy has been quite widely accepted, appropriate diarrhea management by continued feeding has been slower to gain acceptance. They point out that starvation causes gastrointestinal mucosal atrophy that is reversible with prompt feeding. Despite solid scientific evidence showing that feeding during diarrhea improves caloric intake, the practice of "resting the gut" remains wide spread in community practice. Despite malabsorption of nutrients during acute diarrhea, 80-95% of carbohydrates, 70% of fat, and 75% of nitrogen are actually absorbed from mixed diets.
- To compare IM vs SC route of epinephrine, (*J Allergy Clin Immunol* 1998; 101: 33-37) a prospective, randomized, blinded, parallel-groups study was conducted in 17 children (4 to 12 years of age) who were assigned to receive a single injection of epinephrine by either route. Epinephrine was injected SC in a dose of 0.01 ml/kg (0.01 mg/kg) with a maximum dose of 0.3 ml. The epinephrine formulation for IM injection was a dose of 0.3 mg via an EpiPen Auto-Injector. A blood sample was obtained before injection and at 5,10,15,20,30,60,90 and 120 minutes afterwards. At a mean time of 8 $\pm$ 2 minutes for the IM group vs. 34 $\pm$ 14 minutes for the SC group, the mean maximum plasma concentration was significantly higher for the IM group than the SC group.
- The Canadian Early and Mid-Trimester Amniocentesis Trial Group designed a study to assess the safety and cytogenic accuracy of early (11-12 weeks) vs. mid-trimester (15-16 weeks) amniocentesis. There was a significant difference in fetal losses for early amniocentesis and a significant increase in talipes equinovarus in the early group. Amniotic fluid leakage was also higher in the early group (*Lancet* 1998; 351: 242-247).
- To study the effect of intrauterine growth retardation on immunity, the immune status of 25 full term small for gestational age neonates was compared with 25 term appropriate for gestational age neonates, who served as controls. (*J Trop*

Pediatr 1997; 43: 345-348). It was observed that the term SGA's had an altered immunological profile. The lymphocyte percentage was low. Cellular immunity was assessed by DC4 and DC8 subset of T-cells, and their ratio was deranged. IgG levels were lower in SGA neonates and showed a linear relation with birth weight while IgM and IgA levels were not affected in SGAs. Complement C3 levels were significantly lower in the SGA neonates. It was concluded that SGAs are more prone to infections and this deranged immune status could be the underlying explanation for this predisposition.

■ Fever may play a role in fighting infection, namely boosting the immune response by enhancing the ability of white blood cells to migrate out of the blood

stream and into lymph nodes or tissues (J Immunol 1998; 160: 961-969). In this study, the effects of temperature increases on white blood cells were evaluated. After exposing the cells to fever-like temperatures of 100 to 106 degrees Fahrenheit (38 to 41 Celsius) for up to 24 hours, there was 100% increase in adhesion of the cells to specialized tissue that is found in lymph nodes. The lymphocytes use an adhesion molecule, known as L-selectin, to attach to the tissue. This finding may have implications for treatment of cancer with heat therapy to increase access of immune effector cells to regional lymph nodes and tumor tissues.

**Arun Gupta,**  
*Senior Consultant,*  
*Jaipur Golden Hospital,*  
*Delhi.*