Clippings

❑ TV viewing and diabetes

More bad news for TV-loving children, it seems that diabetic children who watch more TV have poor blood sugar control. 538 children and adolescents from nine hospitals in the eastern part of Norway participated in the study. 62 patients (12%) watched TV <1 hour daily; 189 patients (35%) watched TV between 1 and 2 hours daily; 166 (31%) 2-3 hours daily; 75 (14%) 3-4 hours, and 46 (9%) > 4 hours daily. The association between increased TV viewing and high HbA1c remained significant, even after adjusting for age, BMI and insulin dose. Thus the authors conclude that extensive TV watching is associated with poor blood glucose control in children and adolescents with type 1 diabetes. Diabetes Care 2007 [Epub ahead of print]

Comments: Given the high incidence of TV watching and increasing diabetes in the Indian population, this study gives another reason for pediatricians to encourage parents to reduce TV watching in children.

❑ Modern lifestyle and fasting blood glucose levels

Can a modern lifestyle, with a high-energy intake and a low level of physical activity, lead to a higher fasting blood glucose level in healthy kids? As a part of the prospective study 'All Babies in Southeast Sweden', 127 children from six preschool units chose to participate. The children were 5-7 years old. Parents answered a questionnaire about their children's heredity, and physical exercise and eating habits. There was no association between fasting plasma glucose level and body mass index (BMI), eating habits or degree of physical exercise. Children who play outdoors most frequently had a significantly lower BMI and waist circumference, whereas children who more often watch TV had a significantly higher BMI. Hence, as per this study while a modern lifestyle, with low levels of exercise and high-energy consumption, may explain the increasing weight and even obesity of otherwise healthy, preschool children, but does not influence their fasting plasma glucose levels. Acta Pediatr 2007 [Epub ahead of print]

Comments: Another negative for TV watching!

❑ Which mothers will stop Breastfeeding early?

This study was designed to validate a simple breastfeeding score to identify mothers who stop breastfeeding within 4 months after birth. The breastfeeding score was developed from 471 mothers' responses to a questionnaire in 1999 and based on duration of schooling, previous breast-feeding experience, self-efficacy, and mother's confidence in ability to produce milk. The breast-feeding score based on a simple scoring system derived from four risk factors was capable of predicting the breastfeeding duration in an independent sample. It may help health professionals to identify mothers at risk of breast-feeding cessation before 4 months. Acta Pediatr 2007 [Epub ahead of print]

Comments: With the tremendous stress being given by pediatrician to promote breastfeeding an Indian version of this study could provide interesting and potentially useful information.

❑ MMR and autism – tips for doctor education!

This study tried to explore how the measles, mumps, and rubella (MMR) vaccine controversy impacted on the lives of parents caring for children with autism. A purposively selected sample of 38 parents took part in 10 focus group discussions between March 2003 and May 2005. Many parents felt that the MMR vaccine could be too potent for children who are susceptible to developing autism. Of the parents whose children received the MMR vaccine, many felt guilty that they may have caused or contributed to their child's autism. Some parents felt frustrated by health professionals' lack of understanding of the negative impact the MMR controversy has had on them. Some parents were

anxious about subsequent MMR decision-making for their children. Arch Dis Child 2007; 92: 322.

Comments: This has implications for pediatricians in India, who may even face potential litigation from informed parents of affected parents on this issue. They also need to understand the problems faced by parents in future MMR decision-making for their affected child and younger siblings. Advising parents on matters of vaccine safety is an equally important task for us.

❑ Do genital injuries indicate sexual abuse?

Boys with genital injury (penile and/or scrotal) and referred to pediatricians in Leeds, population 750,000, with concerns regarding possible abuse from 1983 to 2003 were identified from medical reports. 86 boys (average age 62.7 months, median age 48 months) were referred between 1983 and 2003. The injury was judged - inflicted in 63, unexplained, suspicious or inconsistent with the history given in 17 and accidental in six. Genital injuries included burns in seven boys, bruises in 27, incised wounds, lacerations or scars in 39, and other traumatic lesions in 27. The categories of abuse were physical (8), sexual (19), both physical and sexual (8), physical and neglect (4), and physical, sexual and neglect (one). The category of abuse was unspecified in 39 children.

Comments: As pediatricians we are the guardians for the unfortunate children who may be victims of sexual abuse. We need to have a high degree of suspicion since we may have to protect them from this heinous crime. Arch Dis Child 2007; 92: 328.

❑ Adenoidectomy – a quality of life survey

Which children are likely to show the best improvement after undergoing adenoidectomy? This was a prospective observational study. The children were evaluated with respect to preoperative symptoms, flexible nasal endoscopy (FNE) findings, and nasal airflow (NAF) studies. Following surgery, a quality of life questionnaire was administered to all available patients and an attempt was made to repeat the NAF study. Fifty-seven patients were included in the study (31 females and 26 males). The authors did not find any correlation between preoperative symptoms, FNE findings, or NAF study results. The degree of symptom reduction was the only predictor of how satisfied a patient would be in the postoperative period. As such, following these symptoms in the postoperative period is important in determining a patient's satisfaction following surgery. J Otolaryngol 2007; 36: 17.

Comments: All the investigations may not help in assessing improvement, whereas significant symptoms prior to surgery may give a clue to likelihood of improvement postoperatively.

❑ Do nutritional programs help the targeted populations in developing countries?

To examine the efficiency of the Bangladesh Integrated Nutritional Program (BINP) in identifying which infants should be supplemented, whether full supplementation was given for the stipulated period of time, and whether the correct exit criteria from the supplementation program were used. To test whether targeted food supplementation of infants between 6-12 months of age resulted in enhanced weight gain. Five hundred and twenty-six infants followed for 6 to 12 months. Out of these, 368 should have received supplementation based on BINP criteria but only 111 infants (30%) did so, while a further 13% were incorrectly given supplementation. So in total over half (52.8%) of the sample was incorrectly identified for supplementation. In addition, less than a quarter of the infants received the full 90 days of supplementation and close to half of the infants exit the program without the requisite weight gain. There were no significant differences in weight gain between the correctly supplemented group and the incorrectly non-supplemented group. This study found serious programmatic deficiencies - inability to identify growth faltering in infants, failure to supplement for the full time period and incorrect exit procedures. There was no evidence that food supplementation had any impact on improving infant weight gain. Public Health Nutr 2007; 10: 49.

Comments: These findings should serve as an eye opener to our government since there is every reason to believe that these findings may be replicated in India too. A formal assessment of our

nutritional supplementation programs and correction of any deficiencies is in order.

❑ Does BCG vaccination help prevent asthma?

BCG vaccination is thought to be among a group of vaccines capable of manipulating the immune system toward T(H)1 dominance and therefore reducing the likelihood of atopic disease. The aim of this study was to determine the influence of neonatal BCG vaccination on the prevalence of wheeze in a large community population of children. In a historical cohort study, a parent-completed questionnaire was used to identify the prevalence of wheeze in BCG-vaccinated and nonvaccinated children in Manchester, England. There were 2414 participants aged between 6 and 11 years. Neonatal BCG vaccination was associated with a significantly lower prevalence of wheeze. Neonatal BCG vaccination may relate to a possible 27% reduction in prevalence, and are therefore of considerable public health importance. J Allergy Clin Immunol 2007; [Epub ahead of print]

Comments: The capacity of neonatal BCG vaccination to reduce the prevalence of respiratory symptoms in children warrants further investigation, and given the fact that it has doubtful efficacy in preventing TB, with the increasing incidence of atopic disorders this may turn out to be its primary role in the future!

❑ Preventing asthma – do dietary changes work?

The Childhood Asthma Prevention Study was a randomized controlled trial conducted in children with a family history of asthma in whom omega-3 fatty acid supplementation and restriction of dietary omega-6 fatty acids did not prevent asthma, eczema, or atopy at age 5 years. Plasma fatty acids were measured at 18 months, 3 years, and 5 years. Compliance with the fatty acid supplements was estimated every 6 months. Dietary intake was assessed at 18 months by means of weighed-food record and at 3 years by means of food-frequency questionnaire. At age 5 years, 516 children were examined for wheeze and eczema (questionnaire) and atopy (skin prick tests). Plasma levels of omega-3 or omega-6 fatty acids were not associated with wheeze, eczema, or atopy at age 5 years. J Allergy Clin Immunol 2007 [Epub ahead of print]

Comments: Modification of dietary poly-unsaturated fatty acids in early childhood is not helpful in preventing atopy and asthma. More strategies need to be evaluated to reduce this significant burden of atopic diseases in children.

❑ National surveillance program to reduce NICU infections

A national nosocomial surveillance system for neonatal intensive care patients with a very low birthweight was set up in Germany in 2000 (NEO-KISS). Forty-eight neonatal intensive care units (NICUs) participated in the program, which focused upon nosocomial bloodstream infections (BSIs) and pneumonia. Twenty-four units that met the selection criteria accumulated data for 3856 patients and 152,437 patient-days in their first three years of participation. The incidence density of BSIs decreased significantly by 24% from 8.3 BSIs per 1000 patient-days in the first year to 6.4 in the third year. The data suggest that participation in ongoing surveillance of nosocomial infections in NICUs, requiring individual units to feedback data, may lead to a reduction in BSI rates. J Hosp Infect 2007 [Epub ahead of print]

Comments: Another one for the policy makers, though it is tough ask, may be the NNF could consider pooling the data from the sentinel NICU centers to create a similar system in our country.

❑ Do Immunoglobulin help in severe Guillain Barre Syndrome?

To compare the clinical results in children with Guillain-Barre syndrome (GBS) admitted to the intensive care unit, patients treated with intra-venous immunoglobulin (IVIG) were compared with patients admitted before the immunoglobulin treatment was introduced. In all, 48 of 96 children were classified - 18 patients as axonal motor acute neuropathy (AMAN) and 30 patients as axonal inflammatory demyelinating polyneuropathy (AIDP). Immunoglobulin did not change the

history of the illness as far as the time of ventilatory support and the time to reach state III on the GBS disability scale. Acta Neurol Scand 2007; 115: 289.
Comments: Stick to IVIG that seems to the reasonable assumption as per this study.

❑ Long term significance of academia at birth

Acidemia at birth is very common but little is known about its long-term consequences. To determine if pH at birth is related to established tests of intellectual function. School children aged 6-8, for whom obstetric data were available, who had been delivered after labor at term, and had an umbilical cord arterial pH >7.00 (*i.e.*, that was not extremely acidemic). This was a retrospective cohort study correlating birth and arterial pH data with childhood tests for non-verbal intelligence, grammar comprehension and literacy. Lower arterial pH is associated with higher scores on literacy and non-verbal intelligence tests at ages 6-8. This is unlikely to be a chance finding and is further evidence that acidemia in isolation should not be considered an adverse outcome. Early Hum Dev 2007 [Epub ahead of print]

Comments: Keep them acidemic, make them intelligent, the motto of the study.

❑ Mycophenolate mofetil works in pediatric lupus nephritis

Intravenous cyclophosphamide (CYC) has been the standard of care to induce remission of severe and active lupus nephritis for more than 20 years. Potential side effects are significant, and failure to achieve remission is still high. Mycophenolate mofetil (MMF) has emerged as a potential alternative to CYC, with an improved safety profile thus far. Experience in the pediatric population is very limited. In this review, intravenous (IV) CYC induction in the sickest patients (renal failure at presentation) was considered and/or when compliance with oral treatment cannot be established. Also, MMF induction in reliable patients with mostly preserved renal function was considered. Pediatr Nephrol 2007 [Epub ahead of print]

Comments: MMF may serve as a therapeutic bridge between the previously well-known, broad-spectrum immunosuppressive drugs and the new, targeted biological agents.

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