Clippings

Clippings

□ A meta analysis on the role of steroids in bronchiolitis in infants, identified 12 studies of which 6 studies that met the criteria were chosen. The length of stay, duration of symptoms and clinical score were the outcomes that were examined. In pooled analysis steroid treated infants had a lesser length of stay, duration of symptoms and a better clinical score than the non treated group. The meta analysis concluded that systemic corticosteroids produce statistically significant improvement on the course of bronchiolitis (Pediatrics 2000; 105: e44).

☐ A systematic review on the efficacy of the ketogenic diet in reducing seizure frequency for children with refractory epilepsy identified 11 studies that met the criteria. The outcomes included complete elimination of seizures, >90% reduction in seizures, and >50% reduction in seizures. Estimates of the rates of improvement by combined analysis were a complete cessation of all seizures in 16% of children; a greater than 90% reduction in seizures in 32% and a greater than 50% reduction in seizures in 56% of children. The reviewers concluded that this degree of benefit is unlikely to be due to a placebo response and/ or spontaneous remission and that the available evidence suggests that ketogenic diet is efficacious in reducing seizure frequency in children with refractory epilepsy (Pediatrics 2000; 105: e46).

☐ Being less of a couch potato helps in treating obesity among children is a cause for increased concern in America. According to researchers, the simple measure of encouraging them to be active could be a solution to this problem. In

this study all members of 90 families with obese children between the ages of 8 and 12 were placed on a comprehensive weight-loss program with main emphasis on increasing activity and reducing sedentary behavior. There was a significant decrease in body fat among all participants that increased with the time they spent being active. The study concluded that reducing sedentary behavior was as effective in treating obesity as specifically increasing physical activity (Arch Pediatr Adolesc Med 2000; 154: 220).

☐ A study to identify the predictors of intussusception in children has found that the presence of the following - rectal bleeding, a highly suggestive abdominal radiograph, and male sex are variables independently associated with intussusception. In this study on 115 children aged less than 5 years who were evaluated for intussusception, 68 (59%) patients had intussusception. Knowledge of the above mentioned variables may assist in clinical decision making regarding diagnostic and therapeutic interventions (Arch Pediatr Adolesc Med. 2000; 154: 250).

□ Controversies notwithstanding, Apgar score is a useful tool in assessing neonatal short-term prognosis. A cohort study on the antenatal and early neonatal correlates of low Apgar scores in preterms found that neonates with low Apgar scores needed cardiopulmonay resuscitation and other interventions during the first 6 to 8 hours of life. The mortality was also significantly increased among preterms with low Apgar scores. Antenatal maternal history and pregnancy complications did not however correlate with subsequent low Apgar scores of newborns (Arch Pediatr Adolesc Med, 2000; 154: 294).

☐ A ray of hope in juvenile rheumatoid arthritis! Etanercept, a soluble tumor necrosis factor receptor (p 75): Fc fusion protein has been found to be effective in polyarticular juvenile rheumatoid arthritis. In this study, 51 of the 69 patients (74%) who received 0.4 mg of etanercept per kilogram of body weight subcutaneously twice weekly for up to three months responsed to the treatment. There were no significant side effects. The study concluded that treatment with etanercept leads to significant improvement in patients with active polyarticular juvenile rheumatoid arthritis. (N Engl J Med 2000; 342: 763). A related editorial has described this biotechnological advance as a new era in treatment of rheumatoid arthritis. (NEJM 2000; 342: 810)

☐ Though formula feeding is not to be encouraged, if the results of this study are to be believed, formula fed babies need not despair. The mental development of babies improves significantly when infant formula is enriched with two essential fatty acids that are found in mother's milk, docosahexaenoic acid and arachidonic acid. In this study, 56 newborns were divided into into three groups and fed different formula for four months followed by mental status assessment at age of 18 months. The authors say that adding the fatty acids can closely mimic the effect of mother's milk on brain development. Though this study adds to growing international support for adding two fatty acids to commercial baby formula, the long term effects of this need to be looked into. (Child Neuro 2000; March).

□ Requirement for intensive care and presence of neurological complications have been found to be the antecedents of sensorienural hearing loss (SNHL) in very preterm infants. A case-control study on 15 preterms with significant sensorineural hearing loss detected before 9 months of age found that these children had longer periods of intubation, ventilation,

oxygen treatment, and acidosis, and more frequent treatment with dopamine or frusemide as compared to the control group (n = 30). Though the duration of jaundice or level of bilirubin were not among the antecedents, coexistence of bilirubin levels with netilmicin overuse was significant factor. The study concluded that among very preterm babies, the coexistence of risk factors for hearing loss may be more important than the individual factors themselves (Arch Dis Child 2000; 82: F141).

☐ The sequelae of bronchiolitis in infancy continues to be in the news. In a study on 97 children (ages 9 to 14 years) who had a past history of having been hospitalized for acute viral bronchiolitis when they were aged between 1 to 12 months, Spanish researchers report a greater prevalence of bronchial hyperresponsiveness to methacholine challenge which was present regardless of episodes of wheezing. According to the authors, increased atopy and decreased pulmonary function may also be detectable in children with a history of acute bronchiolitis, even though some of them do not go on to develop asthma (J Asthma 2000; 37: 73).

☐ The empirical use of broad spectrum antibiotics with a view to avoid infection is a cause for emerging antibiotic resistance in NICU's. A strategy of avoiding amoxicillin and cefotaxime seems to be a way to get around the problem. In this study, two identical NICUs were assigned to different empiric antibiotic regimens. Four hundred and thirty six neonates with septicemia divided in two equal groups, were treated with amoxicillin-cefotaxime and penicillin-tobramycin respectively. Three neonates treated with the penicillin-tobramycin regimen became colonised with bacilli resistant to the empirical therapy used versus 41 neonates on the amoxicillin-cefotaxime regimen. The relative risk for colonisation with strains resistant to empirical therapy was 18 times

higher for the amoxicillin-cefotaxime regimen. The study concluded that a reduction of bacterial resistance can be mediated by use of antibiotics that exert little selective pressure on the mucosal environment (Lancet 2000; 355: 973).

☐ Antibiotic nose drops given to Israeli children and adults born with cystic fibrosis (CF) have reversed the effects of a defective gene that causes CF in 60% of Ashkenazi (European) Jews who have cystic fibrosis. These were the results of a two week pilot study conducted on nine patients aged 12 to 42 years with CF. The findings imply that if a delivery system could be found to deliver gentamicin to clogged mucous membranes deep inside the body, their cells would normalise as well. The authors however advise caution in view of the side effects associated with long term gentamicin use. This study has lead to a ongoing larger clinical trial, this time a double blind, placebo controlled one to evaluate this

new modality of treatment (Amer J Resp Crit Care Med 2000; 161: 860).

Dentists are Innocent! A review of literature (Pediatr Cardiol 1999; 20: 317) on the predisposing factors for infective endocarditis found that rather than dental surgical procedures, the cumulative exposure to bacteremia is significantly greater from everyday procedures. The data on post-procedure bleeding and bacteremia showed that there is no relationship between bleeding and bacteremia and that significant bacteremia can occur in the absence of clinically discernible bleeding. The risk following cumulative exposure is often hundreds, thousands, or even millions of times greater than that occurring following surgical procedures such as extraction of teeth.

C. Vidyashankar,
Military Hospital, Namkum,
Ranchi, Bihar.
E-mail: vidyashankarc@hotmail.com



NOTES AND NEWS

NATIONAL TRAINING PROJECT ON PRACTICAL PEDIATRIC ONCOLOGY PHO CHAPTER OF IAP, SOUTH ZONE WORKSHOP

on August 13 and 14, 2000. The number of participants will be limited to about 30 pediatricians who are practising in the South Zone. A nominal registration fee of Rs. 600/- will be charged towards meeting the costs of refreshments and lunch. The last date for submitting completed registration form is July 7th, 2000. Spot registration will not be entertained. For registration forms and further information, please contact: Dr. U.V. Shenoy, Professor and Head, Department of Pediatrics, University Medical Center, Kasturba Medical College, Dr. B.R. Ambedkar Circle, Mangalore 575 001.