Webster MH, Armitage M *et al*. The importance of testing for adrenoleuko-dystrophy in males with idiopathic Addison's disease. Arch Dis Child 2002; 86:185-189.

3. Korenke GC, Roth C, Krasemann E, Hufner M, Hunneman DH, Hanefeld F. Variability in endocrinological dysfunction in 55 patients with X-linked adrenoleukodystrophy: clinical laboratory and genetic findings. Eur J Endocrinol 1997; 137: 40-47.
4. Laureti S, Casucci G, Santerusanio F, Angeletti G, Aubourg P, Brunetti P. X linked adrenoleukodystrophy is a frequent cause of idiopathic Addison's disease in young male patients. J Clin Endocrinol Metab 1996; 81: 470-474.
5. Hwu WL, Chien YH, Liag JS, Lee WT, Wang PJ, Tsai WY. Adrenoleukodystrophy initially diagnosed as idiopathic Addison's disease in two patients: the importance of early testing. J Formos Med Assoc 2003; 102: 510-513.

## Influence of Child Care Practices on Prevalence of Diarrheal Diseases

Diarrhea is a common illness and a leading cause of malnutrition and death in under five children of developing countries(1). Child-care practices including personal and domestic hygiene play an important role in diarrhea prevention.

A cross-sectional, community based, observational study was undertaken in a suburban area of Kolkata, to study the role of child care personnel in occurrence of diarrhea. Municipal records showed 40% diarrhea prevalence among under fives in the study area during two weeks time. Based on this a sample size of 300 was estimated, and the subjects were selected by systematic random sampling technique.

The study population showed a diarrhea incidence of 31.67% in a two week recall period, which was much higher than the figure reported in children under three years of age, by NFHS 2 in West Bengal(2). The incidence of diarrhea was inversely proportional to the increase in educational level of the mother, this difference being strongly significant ($P < 0.005$). Incidence of diarrhea increased with the increase of income levels of their families ($P < 0.05$). Diarrhea cases were significantly more ($P < 0.001$) among under five children of working mothers. Children who were looked after by their mothers showed least incidence of diarrhea, followed closely by those looked after by trained outside nurse. Children who were cared for by untrained outsider suffered the most. This trend was strongly significant ($P < 0.005$). Exclusively, breast-fed infants showed least incidence of diarrhea, followed by spoon fed and bottle fed ones. Those who were fed by hand showed a very high diarrhea incidence, which was significantly more than that among exclusively breast fed babies ($P < 0.01$).

**Debasmita Bandyopadhyay,**
**Bratati Banerjee,**
*Department of Public Health Administration,*
*All India Institute of Hygiene &*
*Public Health,*
*110, Chittaranjan Avenue,*
*Kolkata 700 073, India.*
*E-mail: bratatibanerjee1@hotmail.com*

**REFERENCES**

1. Ghai OP, Gupta P. Essential Preventive

Medicine: A Clinical and Applied Orientation. 1999. Vikas Publishing House Pvt. Ltd., New Delhi.

2. National Family Health Survey 1998-1999, India 2001; International Institute for population Sciences, Mumbai.

## Carrier Parents of Tay Sachs Disease and β-Thalassemia

Tay-Sachs disease and β-thalassaemia are transmitted in autosomal recessive manner. These diseases differ remarkably, in their etiology and clinical presentation. We report two siblings affected by these two different disorders. Both the parents were diagnosed to be carriers for Tay-Sach's disease as well as β-thalassemia.

The couple in the discussion brought their eighteen months old male child with complaints of regression of milestones for six months, attack of generalized tonic clonic seizure 2 months back, and respiratory distress of five days duration. He was born of non-consanguinous marriage and an uncomplicated full term vaginal delivery. No major antenatal or postnatal problems were noted.

This was their 2nd child, the 1st being a female child who died at the age of three and a half years. That child's illness had also started with similar complaints of regression of milestones and convulsions. That child had died undiagnosed.

On examination, growth was within normal limits but there was global mental retardation, developmental age corresponding to 6 months. General examination was normal. There were no dysmorphic features, neurocutaneous syndromes and also no apparent gross congenital malformation. Respiratory system examination revealed bilateral wheezing. Abdominal examination showed no organomegaly. In central nervous system examination, the child was conscious, with no cranial nerve palsy. The only positive findings were hypertonia and hyperreflexia of all four limbs with intermittent scissoring of both the lower limbs with exaggerated startle response. The fundus examination showed bilateral cherry red spots in the macula.

Hematological and radiological studies were normal. EEG suggestive of primary generalized epilepsy was reported. Tay-Sachs disease was suspected and blood lymphocyte enzymatic studies for hexoseaminidase levels of both parents were carried out. This showed B-hexoseaminidase (Total) 300 nmoL/hour/mL of protein in father, and 264 nmol/hour/mL of protein in mother, against the normal levels of 801$\pm$ 90 nmol/hour/mL of protein. The B-hexoseaminidase-A levels were 44% in father, 40% in mother, against the normal values of 55 to 72%.

Thus, both the parents were diagnosed to be carrier of Tay-Sachs disease. Also, with the combination of the clinical and the investigative data, diagnosis of Tay-Sachs disease was confirmed in the child. The child was treated symptomatically and anti-epileptics were given for the control of convulsions. However, the child died at the age of 30 months.

The parents were explained about the nature of the disease and genetic counseling was also done, also prenatal diagnosis during further pregnancies was also advised emphatically. So, when the mother was