Letters to the Editor

Role of Viruses as Causal Agents of Sporadic Infantile Diarrhea in Calcutta

In view of the recent recognition of some viral etiological agents of acute infantile diarrhea(1), we conducted this study to identify viruses as the causative agents of infantile diarrhea in Calcutta. From April 1986 to March 1988, two hundred and eighteen infants aged below six months, suffering from acute watery diarrhea of less than three days duration, irrespective of severity, were included in this study. They were admitted to the Dr. B.C. Roy Memorial Hospital for Children between 8 a.m. to 1 p.m. during the first four days of the week. One or more bacterial or parasitic agents were found in 157 (72.0%) cases. However, conventional and newer techniques failed to identify any enteropathogen in sixty one fecal samples. Subsequently these samples were processed by double spin method and examined under electron microscope(2). Different viruses were detected in 13 (21.3%) samples. They were identified as rotavirus in 5 (8.2%) cases, coronavirus in 4 (6.2%) cases, adenovirus and small round featureless virus in 2 (3.3%) cases each. Low detection rate of rotavirus (8.2%) in children less than 6 months of age in the present study corroborates the findings of our earlier observation(3) though the frequency of detection of rotavirus from diarrheal children in the age group of 6 months to 23 months was much higher. Frequency of detection was higher in winter months (December though January). Stool samples collected from age, sex, socio-economic status matched thirty control infants attending well baby clinic of the same hospital, without having diarrhea during last three weeks, were also screened under electron microscope. Except rotavirus in 1 (3.3%) sample, no other virus could be detected. Clinical features of these cases were summarized in the *Table I.* Clinical picture of viral diarrhea was characterized by a high frequency of vomiting, fever and respiratory symptoms. In 8(61.5%) of the infants, vomiting was the initial symptom preceding diarrhea. In addition, seasonal characterestics such as prevalence in winter months supported the diagnosis of viral diarrhea.

TABLE I –*Clinical Features of 13 Infants with Viral Diarrhea*

Clinical symptoms	No.	(%)
Diarrhea	13	(100)
Diarrhea >10 times daily	5	(38.5)
Vomiting	13	(100)
Vomiting >5 times daily	9	(69.2)
Fever	13	(100)
Fever >39°C	2	(15.4)
Respiratory symptoms	8	(61.5)
"Some" dehydration	13	(100)
Clinical course in days	*Mean*	*± SD*
Symptoms before hospitalization	2.5	(0.8)
Symptoms after hospitalization		
Diarrhea	3.4	(1.1)
Vomiting	1.1	(0.4)
Fever	2.6	(0.9)
Hospital stay	4.5	(1.2)

Rotavirus and enteric adenovirus were well established medically important pathogens causing infantile diarrhea. However, coronavirus and small round featureless viruses were identified in the present study though their role of causation of diarrhea is still unknown(4).

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Adverse Drug Reaction Monitoring of Ciprofloxacin

With reference to the article entitled "Adverse Drug monitoring of Ciprofloxacin in Pediatrics Practice" by Karande *et al.*(1) I would like to include another unusual side effect of Ciprofloxacin.

A ten-years-old female child was admitted at Yashwantrao Chavan Memorial Hospital at Pimpri, with history of fever for seven days. On examination the child was febrile and toxic. Spleen was palpable 1 cm below the left costal line. Rest of the findings were normal. Investigations revealed a hemoglobin of 10 g/dl, total leucocyte count of 8,800/cu mm with 64% polymorphs, 28% lymphocytes, 4% eosinophils and 4% monocytes. ESR was 9 mm of Hg. Urine and stool examination and Chest *X*-rays were normal. Blood Widal was positive with O and H titres in dilution of 1 in 240. Child was started on intravenous chloramphenicol 100 mg/kg/day every six hours and supportive treatment. Child did not respond and hence on 5th day was started on oral Ciprofloxacin (15 mg/kg/day) in two divided dosages. On third day, the child developed a squint in left eye (10°). Rest of the neurological examination was normal. Fundoscopic examination and refraction were normal. Cerebrospinal fluid was examined which was normal. The child became afebrile on fourth day and was discharged on seventh day. Till discharge the squint was same without abnormal neurological finding. The child was lost for follow up.

As there is no other cause for development of squint, we assumed it as unusual