

Dengue epidemic in children in Delhi region 2006 — similarities to the Karachi epidemic of 2006

Madam, We read with great interest the recent publication by Ahmed et al.¹ We share our clinico-haematological data of 41 consecutive children hospitalized with suspected dengue at a general hospital in Faridabad, a peri-urban industrial town, 40 miles South-west of New Delhi between September to November 2006.

The mean age of these children was 8.5 ± 3.18 years (range 0.2 to 17 years). 24 (58.5%) children were less than 10 years of age. Male: Female ratio was 2:1. Diagnostic categories as per World Health Organization (WHO) guidelines were Dengue fever 17 (41.5%), Dengue Haemorrhagic fever 18 (43.9%) and Dengue Shock syndrome 6 (14.6%). Serology was positive in 6 children (30 %, done in 20). Clinical features of the hospitalized children are shown in Table.

Table: Clinical features of children hospitalized with suspected dengue

Clinical Feature	N (%)
Flushing	11 (26.8)
Conjunctival suffusion	12 (29.2)
Fatiguability/Malaise	36 (87.8)
Puffiness of face	16 (39)
Calf pain/tenderness	16 (39)
Headache	11 (26.8)
Abdominal pain	25 (61)
Vomiting	26 (63)
Lymphadenopathy	4 (9)
Diarrhea	2 (4.8)
Itching	6 (14.6)
Bleeding manifestations	25 (61)
Petechiae/purpura	18 (44)
Haematemesis/Melena	2 (4.8)
Epistaxis	5 (12)
Hematuria	1 (2.4)
Bleeding from gums	2 (4.8)
Encephalopathy/drowsiness	5 (12)
Hepatomegaly	14 (34)
URI (cough/coryza)	7 (17)
Splenomegaly	3 (7.3)

Laboratory parameters consisted of anaemia in 11 (26.8%), leucopenia in 14 (34.1%), thrombocytopenia less than 50,000 in 18 (43.9%), neutrophilia in 10 (24.4 %), abnormal Liver, kidney and coagulation profile in 2, 5 and 1 child respectively. Pleural effusion, ascites and Gall

bladder wall oedema (>6 mm) were seen in 10(24.4%), 15 (36.6%) and 13 (31.7%) children respectively. Co-infections (one mixed E.coli and enterobacter sepsis, one enterobacter and two widal positive) were seen in four children. One severely malnourished child died secondary to massive generalized haemorrhage.

The findings noted reflect remarkable similarity to the children with dengue reported from Karachi during the same time period with respect to clinical-haematological profile as well favourable outcomes except the occurrence of pleural effusions, ascites and gall bladder wall oedema in our series.¹ This difference might be due to more secondary infections in our children as compared to those from Karachi where the prior major epidemic was reported in only 1994 in contrast to our region which has seen repeated epidemics. Similar reports are available from other regions of Delhi.² In both India and Pakistan about one-fifth of causes of undifferentiated febrile illnesses in children have been attributed to dengue.^{3,4} Though all four serotypes are reported to be circulating in India and Pakistan recently the major circulating serotype of Dengue has been reported to be serotype 3 in both countries.^{5,6} Dengue virus circulating in India and Pakistan seems to be similar and thus give similar clinical manifestations in children. This highlights a need for collaborative efforts for sero-epidemiological surveillance in both countries.

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