CASE REPORT

Vertical Transmission of Dengue—A Case Report

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Case Report

A 28-year-old primigravida, resident of Amritsar married for 3 years, was admitted to Sri Guru Ram Das Institute of Medical Sciences and Research Institute, Sri Amritsar, at 34 weeks of gestation with history of high grade fever (103 °F) with rigors and chills for 7 days which was associated with severe body aches and weakness. On admission, her temperature was 102 °F, pulse 110/min, respiratory 16/min, and BP was 110/70 mm of Hg. On examination, petechiae were present over both feet, and fundal height was 30 weeks. The complete blood count (CBC) revealed hemoglobin—11.8 g/dl, hematocrit—33 %, platelet count—20,000/ml, and WBC—3,900/ml. Coagulation analysis revealed normal results. Widal test and malaria card test were negative. The diagnosis of dengue was confirmed when IgM and IgG antibodies specific to dengue virus were detected. Renal function,

liver function test, and serum electrolytes showed normal values.

On the second day of admission, biophysical profile score was recorded, and Color Doppler for fetal well being was done which showed mild oligohydramnios with BPP score 8/10 with normal Doppler studies. Two units of SDPC were transfused daily for 3 consecutive days, and platelet counts were 18,000, 23,000, and 30,000/ml on these days, respectively. On the third day of admission, the patient went into preterm labor and delivered vaginally with right mediolateral episiotomy a female baby weighing 2.5 kg with Apgar scores of 6 and 8 at 1 and 5 min, respectively. Inj vitamin K 1 mg was given as routine. Labor and postpartum period were uneventful in spite of thrombocytopenia. Mother was discharged on the 5th day with platelet count 1.5 lakh/ml.

Baby was grunting and so she was admitted to NICU. Her initial CBC count showed hemoglobin—15.4 g/ml, hematocrit—43 %, WBC—24,600/ml, and platelet count—54,000/ml. On the same day, baby developed petechiae, subconjunctival hemorrhage, and brownish aspirate from ryles tube. Serology for dengue was sent, and IgM for dengue was positive. Baby was treated with appropriate fluid management, antibiotics, and platelet-rich plasma. Petechiae gradually spread to trunk and extremities. After 4 days, baby developed boggy swelling over head. On day 10, baby developed generalized anasarca and hepatomegaly with blood urea—175 mg/dl, serum creatinine—2.0 mg/dl, serum Na—111 meq/l, serum K—2 meq/l, serum proteins—4.6 g/dl, and serum bilirubin—14.5 mg/dl. CBC

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Fig. 1 Petechial rashes on arm and face of the baby

showed thrombocytopenia, and the baby expired on the 10th day because of multiorgan failure (Figs. 1, 2).

Discussion

In early pregnancy, there is no evidence for vertical transmission, but it can occur in late pregnancy. In the study on “Dengue infection in pregnancy” it was found that there is increase in low birth weight and preterm births among pregnant women with dengue infections. The authors concluded that there is a risk of vertical transmission, but whether it is significant risk factor for adverse pregnancy outcomes is inconclusive [1]. It is reported in the world literature that the congenital dengue infection is

Fig. 2 Petechial rashes on arm, face, and chest of baby

rare [2]. This case is being reported because vertical transmission of dengue infection at term is very rare. Obstetricians and neonatologists should be more careful in providing adequate care of mother and baby if there is dengue infection near delivery.

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