

## LETTER TO EDITOR (VIEWERS CHOICE)

### NEONATAL RICKETTSIAL FEVER

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**Key words:** Rickettsial fever, neonates

A 17 days old male neonate first issue of nonconsanguinous marriage presented with history of 5 days of fever and rash all over body of 2 days duration. Rash was maculopapular, non-confluent. It started initially over abdomen and spread to all over body including palms and soles within 2 days. There was no history of exanthematous fever in mother in recent past. No other family member suffered from similar illness. There were pet dogs kept by family. On examination baby was febrile, 101o F. General and systemic examination was normal except the rash and mild hepatosplenomegaly. Investigations revealed hemoglobin of 15.3 gm%, white cell count of 17000/cumm (polymorphs 75%, lymphocytes 20%, monocytes 2%, eosinophils 3%) and platelet count of 6,00,000/cumm. C-reactive protein was positive. Liver function tests and renal function tests were normal. Blood culture was sterile. X-ray chest was normal. CSF showed 8 cells, all lymphocytes with normal proteins and sugar. Blood was sent for Weil-Felix test. In view of clinical suspicion of rickettsial fever, the baby was put on oral doxycycline 5mg/ kg body weight on day 2nd of admission. There was remission of fever from very next day of starting doxycycline and rash gradually started fading. Weil-Felix test came positive (OX-19 = 1:80, OX-2 = 1:160). Treatment was continued for 7 days. Stay of baby was uneventful and baby was discharged on 8th day.

Rickettsial fever is a vector borne disease caused by a gram negative intracellular organism. It presents as epidemic typhus, scrub typhus and spotted fever. It is prevalent all over India especially in Himachal Pradesh, Tamil Nadu, Karnataka and some parts of Maharashtra. (1) Rickettsial fever is re-emerging like dengue and leptospirosis in various parts of India. (2-5) Rickettsial infection affects skin, central nervous system, heart, lungs, and skeletal muscle. Fever and non-confluent maculopapular rash involving palm and soles is characteristic.

Weil-Felix (WF) test demonstrates heterophile antibodies to strains of proteus mirabilis. Test is positive in 50% cases. A titre of 1:80 and above is considered as positive. Though the test is nonspecific, it is the only easily available test in India. Good correlation between the results of WF test and detection of IgM antibodies by an immuno-fluorescence assay has been demonstrated. (6,7)

In our case it is difficult to pinpoint the exact type of rickettsial fever. However according to the WF titers the most probable Rickettsial disease could be tick born spotted fever or epidemic typhus. Absence of louse infestations in the neonate and other family members excludes possibility of epidemic typhus. In this case it

was most probably tick borne typhus which is endemic in the area. The source of ticks could be pet dogs kept by family. Further confirmation of the type of rickettsial fever was not possible.

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