Persistent Thrombocytopenia Due to Scrub Typhus

A 5 year old girl presented with fever for 7 days with no history of myalgia, joint pains, gastro-intestinal symptoms and bleeding tendencies. She was sick, febrile (102°F), tachypneic (RR-52/min), and had a pulse rate of 124/min and BP of 100/68 mm Hg. She had conjunctival suffusion but no lymphadenopathy, rash or eshcar. Systemic examination was unremarkable except for hepatomegaly of 3 cm and spleen of 1cm. Laboratory tests were as follows: Hb 11g/dL, TLC 4. 6 ×10³/mL with normal differential count, platelets 21×10³/mL, ESR 50 mm and haematocrit 30%. Other investigations revealed SGOT 201 U/L, SGPT 124 U/L and blood sugar 88 mg/dL. Blood urea, creatinine, electrolytes, total proteins and albumin levels were normal. Chest X-ray, ultrasound abdomen and thorax were also normal. In view of conjuctival suffusion, tachypnea and thrombocytopenia, a differential diagnosis of dengue, leptospirosis and typhoid was made. Child received IV fluids, oxygen and parentenal ceftriaxone. Her blood and urine culture was sterile. Serology for typhoid, leptospira, dengue and QBC for malarial parasite were negative. She remained febrile even after 6 days of IV ceftriaxone and her platelets remained persistently below 50×10³/mL. Her HIV, Weil-Felix, Paul Bunnel and Brucella tests were negative but immunochromatography test (both IgM and IgG) for scrub typhus was positive. She received oral doxycycline and became afebrile in next 36 hours. Her platelets rose to 96×10^3 /mL by 4^{th} day and 360×10^3 /mL by 8^{th} day and she was discharged.

Scrub Typhus is caused by *Orientia tsutsugamushi* and very few reports are available in children from India [1,2]. The case fatality in untreated may be as high as 10% [2]. Out of 5 children, none had rash or eschar in a report from

India, and typical rash and eschar may not be always present [1,2]. In another study from Thailand 7 out of 73 children with scrub typhus only 7% had skin rash and eschar and only 19% had thrombocytopenia [3]. Distinguishing scrub typhus from other acute febrile thrombocytopenic illnesses like enteric fever, malaria, dengue in tropical countries is usually difficult. In malaria, associated anemia in a non toxic child gives clue. In enteric fever, GIT symptoms in a toxic child with leucopenia and eosinopenia will help. Dengue will have characteristic rash, retro-orbital pain, myalgia, bleeding tendencies with increased haematocrit and raised liver enzymes. Watt, et al. [4] noticed that hemorrhagic manifestations, low platelet count (<140,000/mm³) and low WBC count (<5,000/mm³) were strongly associated with dengue when compared to Scrub typhus in adults [4]. Our child also had low WBC count (4600/mm³⁾, severe thormbocytopenia (21000/mm³), raised liver enzymes similar to dengue. Therefore a high index of suspicion is important as scrub typhus is treatable with easily available antibiotics.

K JAGADISH KUMAR AND VG MANJUNATH

Department of Pediatrics, JSS Medical College, JSS University, Mysore, Karnataka, India. jagdishmandya@gmail.com,

REFERENCES

- Mahajan SK, Rolain JM, Sankhyan N, Kaushal RK, Raoult D. Pediatric scrub typhus in Indian Himalayas. Indian J Pediatr. 2008;75:947-9.
- Pavithran S, Mathai E, Moses PD. Scrub typhus. Indian Pediatr. 2004:41;1254-7.
- 3. Silpapojakul K, Varachit B, Silpapojaku K. Paediatric scrub typhus in Thailand: a study of 73 confirmed cases. Trans Royal Soc Trop Med Hyg. 2004:98;354-9.
- 4. Watt G, Jongsakul K, Chouriyagune C, Paris R. Differentiating dengue virus infection from scrub typhus in Thai adults with fever. Am J Trop Med Hyg. 2007:76;801-5.

Retracted Nipples

We disagree with Satpthy and Nanda [1] and Gupta and Kumar [2], that the new method described by Rathi and Mandaliya [3] is culturally and/or socially unacceptable and/or against the research ethics and/or injustice to women, being a vulnerable group.

There are 5 parameters to assess, whether it is really so or not? These are: Whether:

⁽i) Message providers are responsible and mature adults?

⁽ii) Message recipients are responsible and mature adults? (iii) Is the aim holy and beneficial?

⁽iv) Is there any publicly indecent/vulgar exhibition (e.g. video demonstration etc. as in family welfare programs) planned in the transmission of the message? and

⁽ν) Has there been alike method in practice in past/ present? and if yes, what were the consequences/ reaction of society at large?