

lysosomal diseases as well as in diseases like glycogen storage disease type IV, Alagille disease, arteriosclerosis, β -thalassemia major, sarcoidosis and malaria [10,11]. Our case adds to the spectrum of lysosomal storage disorders with increased chitotriosidase activity. However, it is also possible that the nearly 10 fold elevation in our patient could be secondary to intercurrent infection as the enzyme level is high in bacterial and fungal infections due to inflammatory cytokines that augment production [11].

In conclusion, though manifestations of FD are unique, diagnosis can be delayed if symptoms are misinterpreted. Without the availability of acid ceramidase activity testing in India, tissue biopsy is diagnostic. However, availability of genotyping in India may replace the need for invasive histopathological diagnosis. DNA banking is an urgency in circumstances where mortality in genetic disease like FD is early and unpredictable. This report serves to raise awareness amongst physicians for the need to preserve DNA in cases of suspected fatal genetic diseases.

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Pediatric Scrub Typhus in South Sikkim

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We present five cases of paediatric Scrub typhus from Community Health Centre, Namchi, South Sikkim emphasize timely diagnosis of scrub typhus for appropriate management. Response to doxycycline was good, with fever subsiding within 48-72 hrs of starting the treatment. Four out of five cases completely recovered once appropriate medication was given.

Key words: Child, India, Scrub typhus, Sikkim.

Scrub typhus is endemic in regions of eastern Asia and the South Western Pacific (Korea to Australia) and from Japan to India and Pakistan [1-6]. Scrub typhus is prevalent in many parts of

India but specific data are not available [7]. There have been outbreaks in areas located in the Sub-Himalayan belt, from Jammu to Nagaland. There were reports of Scrub typhus outbreaks in Himachal Pradesh, Sikkim and

Darjeeling (West Bengal) during 2003-2004 and 2007. Outbreaks of Scrub typhus are reported in Southern India during cooler months of year [8].

Non-specific presentation and lack of characteristic eschar leads to misdiagnosis and under reporting of scrub typhus. Further, non-availability of diagnostic facilities in native areas makes it even more difficult for the physicians to correctly diagnose and treat. We present five cases of pediatric scrub typhus from Community Health Center, Namchi, South Sikkim.

CASE REPORT

Details of all five cases of pediatric scrub typhus are presented in **Table I**. Suspicion of rickettsial disease was kept in mind after malaria and typhoid were ruled out. All cases were discussed with NCDC, Delhi and samples were drawn and sent immediately before starting doxycycline. Response to doxycycline was good, with fever subsiding within 48-72 h of starting the treatment. In all five cases significant titer of antibodies more than 160 in OX K antigen in Weil Felix test were found, and

TABLE I CLINICAL PROFILE OF PEDIATRIC SCRUB TYPHUS PATIENTS IN SOUTH SIKKIM, INDIA.

<i>Clinical and laboratory features</i>	<i>Case 1</i>	<i>Case 2</i>	<i>Case 3</i>	<i>Case 4</i>	<i>Case 5</i>
Age (y) Sex	5/F	5/M	9/F	10/M	12/F
Presenting complaints	Fever & cough × 5 days Conjunctival congestion, Erythematous rash on face & upper chest	Fever × 6 days Cough × 4 days Diarhoea × 2 days Swelling of feet × 1 day	Fever & abdominal distension × 8-10 days, Abnormal behaviour × 2-3 days	Fever & headache × 10 days Puffiness of face & swelling of face × 3 days	Fever, Chest pain & Headache × 10 days. Fast breathing × 2 days. Altered Sensorium × 1 day
History of insect bite	-	-	-	+	-
Irritability	-	-	+	-	Delirious
Pallor	+	+	+	+	+
Edema	-	Both feet	Both feet & eyelids	Anasarca	Both feet
Skin ulcer/ eschar	-	-	-	On Scrotum	-
Hepatomegaly	5cm BCM*, Soft & tender	-	6cm BCM*, Soft & tender	-	5cm BCM*, Soft & tender
Splenomegaly	4 cm	-	7cm	-	Just palpable
Respiratory symptoms	-	-	Bilateral rales +	-	-
CNS symptoms	-	-	-	-	Delirium, Babinski sign +
Hemoglobin (g/dL)	8.6	8.9	8.6	10.2	10
Chest X-Ray	NAD	Bilateral mild pleural & pericardial effusion	Bilateral extensive fluffy shadows	NAD	Bilateral extensive fluffy shadows
Ultrasonography	Moderate hepatosplenomegaly with minimal free fluid in pelvis	NAD	Moderate hepatosplenomegaly	NAD	Moderate hepatosplenomegaly
Treatment and Outcome	Ceftriaxone + Doxycycline Afebrile on day 2, liver and spleen size reduced after 5 days, discharged on day 7	Doxycycline Afebrile on day 3 Discharged on day 6	Doxycycline Afebrile on day 4, Edema receded, lung signs improved, Discharged on day 12	Doxycycline Afebrile on day 3, Edema and renal parameters recovered, Discharged on day 6	Ceftriaxone + Doxycycline Expired after 24 hrs of admission

*BCM: Below costal margin; NAD: No abnormality detected.

were also positive for IgM antibodies to *Orientia tsutsugamushi* by Scrub typhus detect IgM ELISA kit (Inbios, USA). Other additional important clinical findings included thrombocytopenia, anemia and low serum albumin.

DISCUSSION

Scrub typhus usually presents with fever, rash and complications involving respiratory, cardiac or central nervous system. Inoculation of *O. tsutsugamushi* through the bite of chigger is often painless and unnoticed [9]. Scrub typhus is common in rural areas. Out of five cases presented, 4 lived in Kuccha house and went for open field defecation which predisposes them to chigger bite. Appropriate history, and finding of eschar are often pathognomonic but can be missed by inexperienced observers. Lack of knowledge among physicians can lead to under diagnosis and improper treatment. Routine laboratory tests are normal; elevated transaminases and hypoalbuminemia can be used as pointer to investigate for rickettsial diseases. In resource poor countries, initial Weil felix test followed by ELISA based test for *O. tsutsugamushi* and *Rickettsia conorii* can make proper diagnosis. Although Indirect immunofluorescence assay (IFA) or Indirect Immuno-peroxidase test (IIP) and polymerase chain reaction (PCR) based tests are considered gold standard in confirmation of rickettsial diseases, they can only be performed in sophisticated laboratories, which was not possible in our case. We made the diagnosis based on clinical symptomatology along with two different tests (weil felix and IgM ELISA) and prompt response and recovery in response to doxycycline. Further studies are required to estimate the exact magnitude of disease in Sikkim.

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Community-acquired *Streptococcus Viridans* Pneumonia in a Healthy Child

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Streptococcus viridans is usually considered to be nonpathogenic in healthy patients. Some strains become penicillin-resistant and cause life-threatening infections in immunocompromised patients. We report an immunocompetent boy who had community-acquired *S. viridans* pneumonia that was resistant to penicillin. Clinicians should note local patterns of virulence and antibiotic resistance in *S. viridans* and adjust treatment strategies accordingly.

Key words: Community-acquired pneumonia, Drug resistance, Immunocompetent,