Introduction

Scrub typhus is an acute, febrile, infectious illness caused by Orientia tsutsugamushi. Humans are accidental hosts in this zoonotic disease. Scrub typhus presents as fever with little to distinguish it clinically from co-endemic diseases like typhoid, leptospirosis, and dengue. The presence of an eschar supports the diagnosis but is variably present. Scrub typhus is prevalent in many parts of India but specific data are not available. 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 during 2003-2004 and 2007. Scrub typhus is a re-emerging infectious disease in India.

Case History

40 year old male patient Bachhiter Singh, resident of Sheikhupur village, Distt SBS Nagar, Punjab was admitted in CHC Mukandpur in the month of September with probable diagnosis of dengue fever with thrombocytopenia. Patient presented with history of on and off fever for 4-5 days along with cough and expectoration. There was no history of vomiting, abdominal pain and bleeding from any site. Occupation of the patient was farming and there was history of bare foot visits to the fields.

Case record:

During hospital stay, the patient remained febrile with highest temperature of 102°C with temperature range of 99°C to 101.4, BP 130-140/80 mm of Hg. Oral intake was poor. Patient was conscious, well oriented in time & space and the higher mental functions were normal. Systemic examination of liver, spleen, kidneys, cardiovascular system, respiratory system, central nervous system was normal. Dermatological examination revealed an erythematous maculopapular rash with petechiae and ecchymoses on right side of chest about 5 cm above the nipple. The wrists, ankles, palms, soles, mucous membranes, face and scalp were spared. The external genitalia were normal.

Laboratory investigation

Platelet count varied from 83000 - 1.08 L/cu mm. Rapid test for Dengue IgM was positive but confirmatory test (IgM Mac ELISA) was negative at Sentinel Surveillance Hospital SBS Nagar. Rapid ELISA test for Scrub Typhus was positive at CMC Ludhiana, Punjab. Blood samples of five suspected patients were negative for Scrub typhus.

Treatment

Patient was treated with intravenous fluids, Inj. Amoxyclav 1gm i/v bid, Injection Metoclopramide i/v sos, Injection Aciloc i/v bid and Tablet Paracetamol 500mg 6 hourly.

Preventive measures

Contact tracing and mass survey was carried out by the teams to find out more cases in area but no similar case was found. A medical camp was held in the area and 34 patients were examined for symptoms of scrub typhus.
Blood samples of five suspected patients were sent to laboratory for confirmation which were found negative for scrub typhus. Indoor Residual Spray was carried out with Malathion 25% wdp in 200 houses for vector control. Sensitization of the local health staff was done to keep a watch on patients with such presentation in the future and report immediately to health authorities. Awareness activities were carried out in the area to sensitize residents about the disease and the prevention thereof.

Conclusions
Scrub Typhus disease is rarely reported from the non endemic state like Punjab. As the disease is usually reported from the neighboring state such as Himachal Pradesh, so there is a need for continuous surveillance in the area for the patients presenting with these features and having travel history to endemic states.

Recommendations
There is a need to sensitize the Medical and Paramedical staff about scrub typhus since the presentation of the disease resembles dengue for which the State of Punjab is high endemic. Moreover, there is need of coordination with Animal Husbandry department in order to control the disease in animals.

References