

A BOY WITH PROLONGED FEVER

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MA, a 6 years old Malay boy, presented to the hospital with a history of fever with chills and rigor for 10 days. He also had cough, running nose, loose stool and abdominal pain. He saw his family doctor 4 days ago and prescribed antibiotics but the fever persisted. On examination, a lesion (Figure 1) was noted on his scrotum.

Question

1. What is the lesion?
2. What is your diagnosis?
3. How is the diagnosis confirmed?
4. What is the management?

Figure 1



Answer:

1. The lesion is an eschar from the bite from by the bites of larval trombiculid mites (also known as chigger), the vector for *Orientia tsutsugamushi*.
2. The diagnosis of this boy is scrub typhus. The majority of cases are from the rural areas in close proximity with oil

- palm and rubber plantation. Symptoms of scrub typhus occur usually 7 to 10 days after the chigger's bite. A papule at the bite site that later ulcerates to form a black crust. Eschar is typically associated with fever, a drainage lymphadenopathy, a macular or maculopapular eruption, headache, and myalgia. In some cases, the eschar and eruption may be absent or indistinct. Typically, the eschar is often hidden in skin folds, beneath the beltline, under the axilla, or in the genitalia region, as in the above patient.
3. The diagnosis of the disease is confirmed by positive titre of scrub typhus specific Ig M by Immunoperoxidase Test (IPT) or Immunofluorescent Test (IFT).
 4. Doxycycline (200mg/day in adult and 2-4mg/kg/day in children) remains the treatment of choice for scrub typhus in all patients, including young children. In general, the risk of dental staining by doxycycline is negligible when a single, relatively short (5-7 days) course of therapy is administered. Alternative drugs, including rifampin (600–900 mg/day) and azithromycin (500 mg the first day and 250 mg/day later); both can also be prescribed in pregnant women.

Further reading

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3. Parola P, Raoult D. Tropical rickettsioses. *Clin Dermatol*. 2006;24(3):191-200

Editor's note: This quiz is based partly on a case report originally published in
Pau WSC, Tan KK. Importance of a thorough examination. *Pediatr Infect Dis J*. 2008;27(6):569-70