

SCRUB TYPHUS

Case Management

Look for these symptoms:

- High grade fever ($>104^{\circ}\text{F}$)
- Severe headache and Myalgia
- Profuse sweating and chills
- Painless black eschar (scab) in site of bite (seen in 40% of cases)
- Cough
- Rashes
- Red eye
- Diarrhea
- Enlargement of Lymph node



Eschar

Key Facts

- Scrub typhus is an acute, febrile, infectious illness that is caused by bacteria *Orientia tsutsugamushi*.
- Humans are accidental hosts in this zoonotic disease.
- Scrub typhus is transmitted to humans and rodents by some species of trombiculid mites ("chiggers", *Leptotrombidium delicense*)
- Humans acquire the disease from the bite of an infected larval stage of the mite (chigger). The bite of the mite leaves a characteristic 'eschar' that is useful for making the diagnosis
- Scrub typhus is generally seen in people whose occupational or recreational activities bring them into contact with habitat of chiggers such as vegetation- consisting of low-lying trees and bushes in banks of rivers, rice fields, poorly maintained kitchen gardens, grassy lawns.
- It occurs more frequently before and after the rainy season. Outbreaks of Scrub Typhus were reported across the country after the Nepal earthquake 2015.
- The disease is difficult to recognize and diagnose because the symptoms and signs of the illness are often non-specific.
- The incubation period of scrub typhus is about 5 to 20 days (mean 10-12 days) after the initial bite.
- For contaminated clothing, ensure proper management by containment and washing clothing/linens in hot water >60 degrees or chlorinated bleach solution (0.5% bleach)

Laboratory diagnosis	Clinical Sample to be collected	Method	Assay	Facility
	2-4 ml blood sample in a plain vacutainer	Serology	ELISA	Reference Laboratory/Tertiary level/Secondary level
		Serology	RDT	All level
Treatment	• Treatment should be initiated early on clinical suspicion as morbidity and mortality increases rapidly with delay in the treatment. Patient with mild illness without organ dysfunction can be managed with antipyretics (e.g. paracetamol) and antibiotics. • <u>Antibiotics</u> • Doxycycline (Drug of choice) 100 mg twice daily for individuals above 45 kg (<i>4.5mg/Kg body weight/day in 2 divided doses for children below 45 Kg</i>) for 7 days. Capsule should be swallowed with a glass of water in sitting or standing position. OR • Azithromycin 500 mg (<i>10 mg/Kg in in single dose for 5 days children</i>) once daily orally for 5 days. • Azithromycin or chloramphenicol is useful for treating infection in children and pregnant woman • When patient cannot swallow or is critically ill, injectable antibiotics should be administered as infusion for duration of 10-15 days: - Intravenous doxycycline 100 mg infusion in 100 ml normal saline over 30 minutes twice daily, OR - Intravenous azithromycin 500 mg once daily as an infusion in 100 ml of normal saline over 1 hour. *No vaccines are available till date for Scrub Typhus.			
Prevention	• Avoiding contact with infected chiggers. • In the areas with lots of vegetation and bush where chiggers may be found wear protective clothing, use insect repellents or insecticides treated clothing. • Chigger control by removal of bush/vegetation and residual spraying of vegetation.			

* All cases should be reported in SORMAS platform

Reference:

1. Epidemiology and Disease Control Division. National guideline on diagnosis, management and prevention of scrub typhus in Nepal, 2079 (2022) [[Internet](#)]. Kathmandu: Government of Nepal, Ministry of Health and Population; 2022 [cited 2026 Sep 16]



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