

Scrub Typhus Infections

Why in News?

A study by Christian Medical College (CMC) Vellore & London School of Hygiene & Tropical Medicine (LSHTM) highlights the high risk of scrub typhus infections in rural Tamil Nadu.

Key Findings of the Study

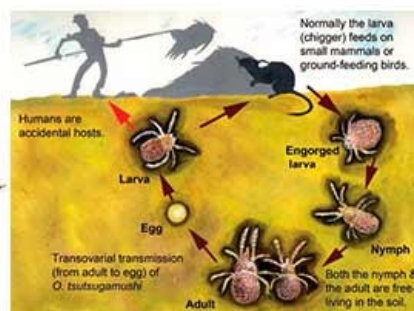
- **Study Area** - Rural areas of Tamil Nadu.
- **Sample Size** - 32,000 individuals.
- **Incidence Rate** - Nearly 10% of the population was infected annually over a 2-year study period.
- **Severity of Cases** - 8%-15% of infected individuals developed fever requiring hospitalization.
- Scrub typhus accounted for 30% of fever-related hospitalizations, making it the second most common cause after COVID-19.
- Five deaths recorded due to severe complications.

Scrub Typhus

- It is a severe infection caused by ***Orientia tsutsugamushi*** (a rickettsial bacterium).
- **Vector** - Infected larval mites (chigger).
- **Mode of Transmission** - Humans get infected through the *bite of infected chiggers* (mite larvae).
- The bacteria *enter the bloodstream*, causing systemic infection.

Scrub Typhus

Etiology, Epidemiology
Signs and Symptoms
Pathogenesis, Diagnosis
and Treatment



- **Symptoms** - Fever (develops about 10 days after infection), Headache and body aches, Rash, Eschar (black sore at the site of the chigger bite) - a crucial diagnostic

sign.

- **Complications - Acute Respiratory Distress Syndrome (ARDS)** - severe lung infection.
- **Meningitis** - Inflammation of brain membranes.
- **Multi-organ failure** - Kidney, liver, and heart damage.
- **Septic Shock** - Life-threatening blood infection.
- **Death** - In severe cases if not treated properly.
- **Treatment - Antibiotics** - Doxycycline and Azithromycin are effective.
- Early treatment reduces complications and mortality.
- **Prevention - *No vaccine*** currently available.
- Avoid exposure to mite-infested areas (dense vegetation, bushes).
- Wear protective clothing and use insect repellents.

References

1. [DD News | Scrub Typhus Infections](#)
2. [CDC | Scrub Typhus](#)

