Scrub Typhus Infections

Why in News?

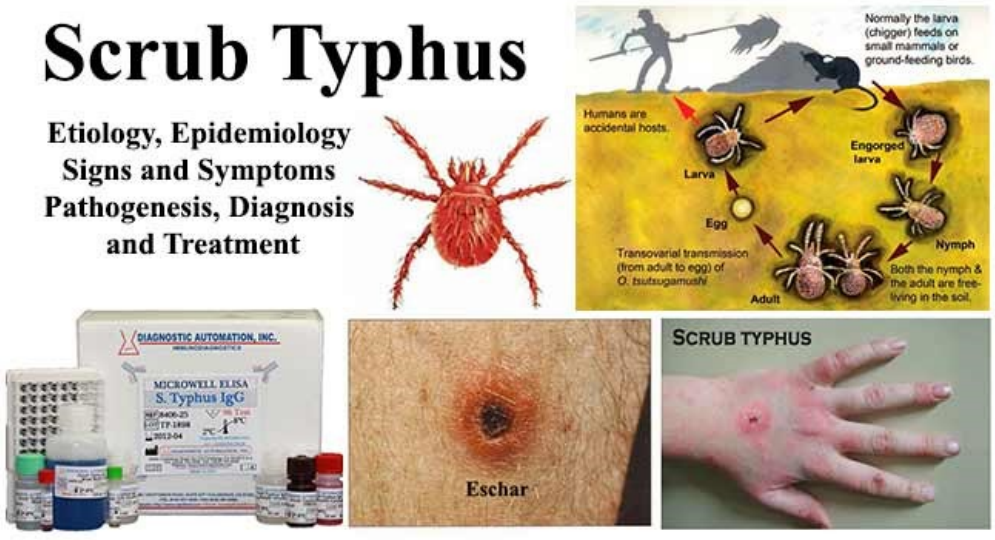
A study by Christian Medical College (CMC) Vellore & London School of Hygiene & Tropical Medicine (LSHTM) highlights the high risk of scrub typhus infections in rural Tamil Nadu.

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.



- **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

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