

## A Review Article on Antibiotics for Treatment of Scrub Typhus

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### ABSTRACT:

Scrub typhus a vector borne zoonotic infection caused by the bacteria orientia tsutsugamushi is one of the most common and clinically important rickettsia infections worldwide. scrub typhus is a major public health treat in India the antibiotics currently used to treat scrub typhus include tetracycline, chloramphenicol, macrolides and rifampicin.

### I. METHOD:

This review is based on the patient publication retrieved by a selective search in medicine and on the authors clinical experiment.

#### Objectives:

To assess the effects of different antibiotics regimens for treatment of scrub typhus.



### II. RESULT:

Tetracycline, doxycycline, azithromycin and rifampicin are effective antibiotics for scrub typhus treatment that have led to few treatment failures. For specific outcomes, some low-certainty evidence suggests there may be little or no difference between tetracycline, doxycycline and azithromycin. Health care workers can use doxycycline as a first line treatment. researchers should standardize the way they diagnose and assess scrub typhus.

### III. CONCLUSION:

- Scrub typhus has re-emerged as a one of the most common life-threatening rickettsial

infections accounting for a million cases annually.

- The prevalence of scrub typhus in present study was 13.7% compared to other Indian studies which range from 13 to 63%
- Scrub typhus also known as bush typhus, is a disease caused by a bacterium called orientia tsutsugamushi. Scrub typhus is spread to people through bites of infected chiggers (larval mites).
- Symptoms of scrub typhus usually begin with in 10days of being bitten. Signs and symptoms may include:



1. Fever with chills, headache, body aches and muscle pain,
  2. A dark, scrub like region at the site of the chigger bite (eschar)
  3. Mental changes, ranging from confusion to coma
  4. Enlarged lymph node
  5. Rash
- People with severe illness may develop organ failure and bleeding, which can be fatal if left untreated.
  - Antibiotics currently recommended to treat scrub typhus include the following –
    - Tetracyclines: doxycycline 100mg twice per a day for one week .in clinical practise, this is favoured over tetracycline owing to convenience of the dosing schedule.
    - Chloramphenicol.
    - Macrolides: azithromycin.
    - Rifampicin.

- A previous version of this review also identified fluoroquinolones as a possible alternative treatment.
- DOXYCYCLINE historically has been the main stay of treatment across the rickettsial disease, including scrub typhus. Given the difficulties associated with cell culture, there is a relative paucity of invitro susceptibility data needed to provide a theoretical basis for its use.
- CHLORAMPHENICOL is the traditional second line treatment and was one of the first drug found to be effective.
- Some review authors conclude that rifampicin seemed to be more effective than doxycycline in areas where scrub typhus responds poorly responds to standard drugs.
- No vaccine is available to prevent scrub typhus.
- Reduce your risk of getting scrub typhus by avoiding contact with infected chiggers.
- When travelling to areas where scrub typhus is common, avoid areas with lots of vegetables brush where chiggers may be found.

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