

# Department of Health and Family Welfare

## GOVERNMENT of KERALA

# TREATMENT GUIDELINES - SCRUB TYPHUS



## **FTIOLOGY**

## **INVESTIGATIONS**



- "Relative lymphocytosis.
- "Thrombocytopenia.

## **Blood Chemistry**

Serum bilirubin -- mild elevation.

SGOT and SGPT -- moderately elevated.

Alkaline phosphatase may be increased.

failure. Serial RFT values are to be done for early diagnosis.

## **Special Diagnostic Tests**

### Weil Felix Reaction:

Positive result is obtained late in the course of illness. It is not a very sensitive test. False positives and false negatives are common and hence not reliable.

### Scrub antibody test:

A single high titer of Iq M antibodies with classical clinical features is

### Tests for detecting complications

ECG: To rule out myocarditis

(Tachycardia and diffuse ST,T wave changes are suggestive of myocarditis)

Chest X-Ray: To rule out pneumonitis.

## **TREATMENT**

### **Blood Routine Examination**

Liver function tests:

### Renal function tests:

These are usually normal unless the patient develops a pre-renal or renal

IgM Elisa is the specific test.

considered as a probable case.

Fourfold increase in Ig M antibodies is confirmatory

(Non-homogenous patchy opacities without air bronchogram.)

EEG and MRI: To diagnose encephalitis

### **General Measures**

Antipyretics:

Paracetamol - 500-650mg 6hrly and SOS Avoid NSAIDs to prevent renal injury Tepid sponging to lower the temperature Adequate fluid intake

### Antibiotic treatment

Cap Doxycycline: 100mg BD x 5-7 days

Tab Azithromycin: 500mg OD x 5-7 days. [Azithromycin 10 mg/kg/day, OD for children]

Azithromycin is generally the preferred drug for children <8 years and pregnant women.

Early initiation of treatment is very important.

In a person from known endemic area, presenting with high grade fever and chills, start treatment early even in the absence of localizing infection and eschar.

[Absence of response to doxycycline is an indication for investigating for other causes]

Cap. Rifampicin in a dose of 450 mg BD x 5-7 days can be used in resistant cases in endemic areas.

### Secondary Bacterial Infections:-

Appropriate antibiotics are to be used.

### Prevention

Protective clothing and use of insect repellents.

## Chemoprophylaxis

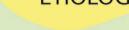
Only in special circumstances

Cap Doxycycline

Dose: 100mg once weekly after food for 6 weeks after exposure







## Infecting Organism Orientia tsutsugamushi

Transmitted by: Chigger mite (bite often unidentified and painless)

Incubation period: 6-20 days.

Chest pain and breathlessness.

## Symptomatology

High grade fever, chills & rigor. Severe myalgia and body ache. Intense headache. Throat pain and dry cough.

Generally upper respiratory symptoms are not a feature of scrub typhus.

## Clinical findings

Conjunctival congestion.

Maculopapular rash.

Regional lymphadenopathy.

Spleen enlargement.

# **Diagnostic Findings**

### Eschar:

It starts as an enlarging papule at the site of chigger bite, often in the concealed and moist areas of the body like axilla. inquinal region and under the breasts in case of women. Later develops in to the classical eschar which is not usually larger than 1cm in diameter. It has a central necrotic black scab, surrounded by a raised ring and surrounding erythema. It is usually not itchy or painful. Eschar is seen in as many as 50% of patients.

## Complications

## Common complications:

Pneumonitis, Myocarditis & Encephalitis.

**Uncommon complications:** Shock, Acute renal failure &

Disseminated intravascular coagulation (DIC)