



TREATMENT GUIDELINES - LEPTOSPIROSIS



ETIOLOGY

Spirochete- *Leptospira interrogans*

Symptomatology

Fever, body ache and head ache.
May have dry cough, sore throat, diarrhea and dysuria.

Later jaundice, oliguria, bleeding tendency, respiratory distress, cardiac failure, convulsions and coma.

Clinical findings

Fever, muscle tenderness especially calf and thigh, low backache, congestion of eyes, later may have sub conjunctival haemorrhage, Jaundice and evidence of hepatic, pulmonary and renal involvement.

Complications

Can occur by the end of 1st week.
Bleeding tendency, Thrombocytopenia and Liver failure, Renal failure.

Acute respiratory distress
Hypotension, Myocarditis, Pancreatitis,
Convulsions and Coma.

Red Flag signs

No response to antibiotics in 8 hrs
Resp: rate >30/min, Urine output < 20 ml/Hr
BP < 90mm systolic
Tachycardia out of proportion to fever
Flapping tremor, Altered sensorium

INVESTIGATIONS

Early (1st 3 days)-
Blood- TC, DC--
Neutrophilic leukocytosis.

After 3 days -
Mild to moderate thrombocytopenia,
Increased Serum Bilirubin with disproportionately low** elevation (Usually <500 IU/L) of ALT (SGPT) & AST (SGOT).

Increased Blood Urea & Serum creatinine,
Increased CPK,
Increased Serum Amylase.
Chest Xray
Non homogenous patchy opacities if ARDS develops.

ECG
Tachycardia disproportionate to fever, with nonspecific ST-T changes.

Regular monitoring
RFT, Repeat X-Ray Chest

***(when compared to infective hepatitis with elevation in thousands)*

TREATMENT

First 3 days
(May be treated as OP if vital signs are stable and if the patient is available for follow up.)

Specific treatment
Cap Doxycycline 100 mg bd x 7 days (preferred)

Or
Cap Amoxicillin 500 mg q8h x 1 week.
For children

If over 8 years,-- Cap Doxy 5 mg /Kg/day, divided 12 hourly, x 7 days

If below 8 years,--Tab. Amoxicillin 50 mg/Kg/day, divided 8th hourly x 7 days
Or

Azithromycin 10 mg/Kg/day, OD x 3 days

Toxic patients with Red flag signs, late consultations and organ dysfunction
Need IP admission & parenteral antibiotics as follows-

Inj CP 15 L 6Hrly x 7 days or Ceftriaxone 1-2 gm 12 hourly x 7 days.

(Ciprofloxacin & Macrolides are alternatives)

For children

Inj CP 2-3 L/Kg /day, divided 6 hourly x 7 days.
or

Inj. Ceftriaxone 50 mg/Kg, divided 12 hourly x 7 days.

Special Precautions

Monitor Fluid intake-output chart for adequate hydration.
Monitor for Red Flag signs
Avoid NSAID

PREVENTION

Chemo prophylaxis

Cap. Doxycycline 200 mg once a week to those who are engaged in high risk jobs like working in contact with stagnant water, canal cleaning etc

Personal protection

Gloves, boots, waterproof dressings for injuries, local applications like neem oil and turmeric before engaging in high risk jobs

Animal housing to be kept away from human dwellings.