

Leptospirosis

**Public Health Division, Directorate of Health
Services**

Thiruvananthapuram

June 2016

Symptomatology

- **Initially**
 - Fever, **MYALGIA** and head ache.
- **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 even in the 1st week.*
- Bleeding tendency, Thrombocytopenia and Liver failure, Renal failure.
- Acute respiratory distress
- Hypotension, Myocarditis, Pancreatitis, Convulsions and Coma.

INVESTIGATIONS

- Early (1st 3 days)-
- Blood- TC, DC- Neutrophilic leukocytosis.
- After 3 days –
- Mild / moderate thrombocytopenia,
- Increased S. Bilirubin with disproportionately low** elevation (Usually <500 IU/L) of ALT (SGPT) & AST (SGOT).
- Increased Blood Urea & Serum creatinine,
- Increased CPK, Increased Serum Amylase.
- After 5 days- Ig M Eliza which is the confirmatory test- Four fold rise in paired serum samples.

INVESTIGATIONS-2

- Chest Xray
- Non homogenous patchy opacities if ARDS develops.

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

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 day*

Treatment

- ***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 bd** 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/day**, divided 12 hourly x 7 days.

Special precautions

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

Red Flag signs

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

Contacts and Clarifications

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- For all queries about phone numbers, email etc of concerned officials of Health Services like DMO, District Surveillance Officer (DSO) District Programme Manager (DPM), RCH Officer (RCHO) of your district, State Officials, institutions, specialists, etc, please call
 - 24 x 7 NHM Health Services helpline **DISHA** on
 - **0471-2552056** (Normal call, any line)
 - **1056** (toll free from BSNL Lines)