Case Report

A Diagnostic Trap: Fatal Leptospirosis in Disguise

Sai Vishnu Battu[1*], *Swathi Dulla*[2]

Leptospirosis is a common post-monsoon zoonosis and an important cause of febrile jaundice with acute kidney injury (AKI). We report a 35-year-old farmer with floodwater exposure who presented with fever, myalgias, jaundice, oliguria, shock and breathlessness. Investigations showed severe hyperbilirubinaemia (peak 44 mg/dl), AKI, thrombocytopenia, metabolic acidosis and bilateral pulmonary infiltrates. Despite antibiotics and intensive supportive care, he progressed to refractory multiorgan dysfunction syndrome (MODS) and succumbed following attempted albumin dialysis. This case highlights leptospirosis as a diagnostic trap and reinforces the need for early suspicion and timely organ-support in severe disease.

Access this article online

Website: www.cijmr.com

DOI: 10.58999/cijmr.v5i01.334

Keywords: Weil's disease, Icterus, Acute kidney injury, Multiorgan dysfunction syndrome, Zoonosis.

Introduction

Leptospirosis, a zoonotic infection caused by leptospira interrogans, is endemic in tropical countries and frequently follows monsoon flooding.

While most cases are mild, the icteric form (Weil's disease) carries a mortality of 5 to 40%, especially when renal, pulmonary, and cardiovascular systems are involved.

This poster presents a fulminant case of icteric leptospirosis with multiorgan dysfunction, highlighting challenges in recognition and management.

Patient Information

Demographics & risk factors

A 35-year-old male farmer, who also reared goats, had a history of walking barefoot in floodwater for long periods.

No comorbidities; no addictions.

Presenting complaints

- High-grade fever with chills for 7 days
- Myalgias of both upper and lower limbs
- Yellowish discoloration of eyes, palms, and soles for 4 days (Figures 1, 2).
- Vomiting (2–3/day), watery loose stools for 3 days
- Decreased urine output with dark urine for 3 days
- Exertional dyspnoea, progressing to breathlessness at rest for 1 day.

On admission vitals

Hypotension (90/60 mmHg), tachycardia (118/min), tachypnoea (32/min), hypoglycaemia (55 mg/dL).

General examination

Icterus, conjunctival suffusion (Figure 1B)

Systemic examination

Hepatomegaly, bilateral basal crepitations.

Clinical course

Day 1

- Fever, jaundice, oliguria, breathlessness, pt is in shock (90/60), hypoglycaemia
- Mx -IV fluids, dextrose, O_2, doxycycline + Piperacillin tazobactam, noradrenaline

[1]Department of General Medicine, Dr. Pinnamaneni Siddhartha Institute of Medical Sciences and Research Foundation, Chinnavutpalli, Gannavaram Mandal, Krishna-521286, Andhra Pradesh, India

[2]Department of General Medicine, Chengalapattu Medical College, Chengalapattu, 603001, Tamil Nadu, India

Correspondence to: Sai Vishnu Battu, Department of General Medicine, Dr. Pinnamaneni Siddhartha Institute of Medical Sciences and Research Foundation, Chinnavutpalli, Gannavaram Mandal, Krishna-521286, Andhra Pradesh, India.
E-mail: dhanalakshmikurapati1973@gmail.com

Submitted: 12/03/2026 Revision: 25/03/2026
Accepted: 10/04/2026 Published: 20/04/2026

How to cite this article: Battu SV, Dulla S. A Diagnostic Trap: Fatal Leptospirosis in Disguise. Central India Journal of Medical Research. 2026;5(1):118-120.

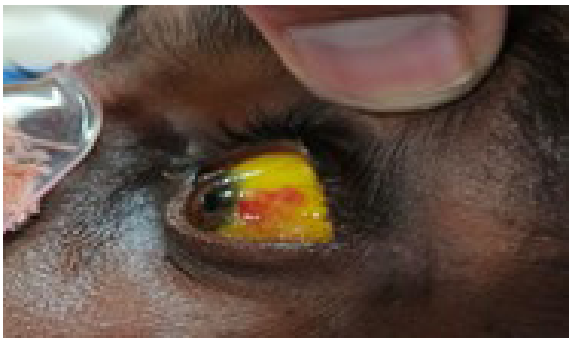

Figure 1: Yellowish discoloration of eyes for 4 days

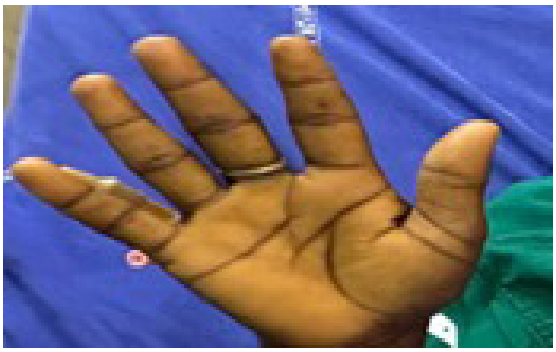

Figure 2: Yellowish discoloration of palms, and soles for 4 days

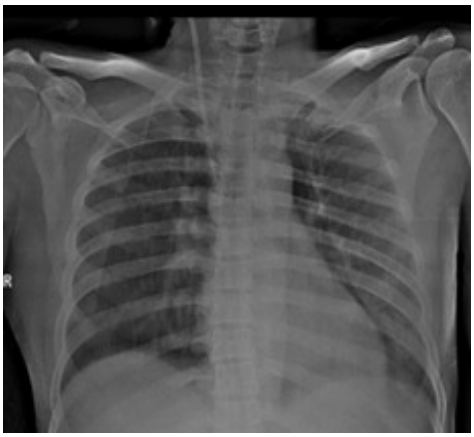

Figure 3: X-ray - bilateral infiltrates on 3rd day

Figure 4: Missing Caption

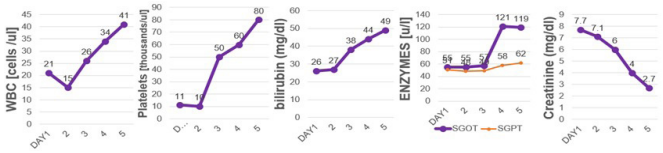

Figure 5: Missing Caption

Day 2

- Creatinine raised 7.7, bilirubin raised, metabolic acidosis.
- Opinions: Nephrology (AKI III, RRT), gastroenterology (NAC, antioxidants)
- Mx: Bicarbonate, RDP transfusions

Day 3

- X-ray - bilateral infiltrates (Figure 3), Fundus - retinal haemorrhages.
- Status: Hypoxemia worsened fever, viral panel – negative, USG abdomen: Hepatomegaly, renal parenchymal changes.
- Mx: NIV started, antibiotics escalated to meropenem.

Day 4

- Bilirubin peaked at 44 mg/dl, oliguria persists <100 mL/day, Single-pass albumin dialysis (SPAD) advised, delayed due to financial issues.
- Mx: Continued NIV + inotropes

Day 5 -SPAD attempted > Sudden Hypotension > Cardiac arrest > Despite ACLS, patient died.

Final Dx

Icteric Leptospirosis with MODS.

Discussion

Leptospirosis is a diagnostic trap

Its presentation with fever, jaundice, AKI, and shock overlaps with sepsis, dengue, malaria, and viral hepatitis, often delaying recognition.

- In our case, the negative viral panel and sepsis-like presentation delayed the diagnosis.
- Poor prognostic markers in this case included jaundice, oliguria, hypotension, pulmonary infiltrates, and thrombocytopenia.

Management lessons

Early empirical antibiotic therapy is lifesaving. Supportive care with fluids, inotropes, and transfusions is essential.

- Advanced therapies, such as early hemodialysis, plasma exchange, and albumin dialysis (SPAD), may

improve survival. However, once fulminant MODS sets in, mortality remains high.

- Prevention via public health measures, protective footwear,

Conclusion

- Leptospirosis remains the great masquerader. Every case of febrile jaundice with AKI in endemic regions should be considered leptospirosis until proven otherwise.
- Early recognition, multidisciplinary management, and public health preventive measures remain critical to reduce fatality.

References

1. Predictors of severe leptospirosis: a review. Eur J Med Res. 2025;30:445.
2. Sethi A, Kumar TP, Vinod KS, et al. Kidney involvement in leptospirosis: a systematic review and meta-analysis. Infection. 2025;53:785-796.
3. Rajapakse S, Fernando N, Rodrigo C, et al. Leptospirosis. Nat Rev Dis Primers. 2025 May 2;11(1):32.