

A SPORADIC CASE OF SEVERE LEPTOSPIROSIS WITH A SHORT RECOVERY PERIOD

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Introduction. Leptospirosis, a globally significant zoonotic infection, is predominantly found in tropical and subtropical areas. While most cases are mild or asymptomatic, severe forms may lead to fatal outcomes. With an estimated >1 million cases and 59,000 deaths annually, leptospirosis presents various prognostic challenges. High mortality is often associated with complications such as hemorrhagic ARDS, acute renal failure, disseminated intravascular coagulation (DIC), and septic shock. The case described herein involves a severe form of leptospirosis with an unexpectedly shortened recovery period.

Aim of the study. This case suggests the need for further randomized controlled trials in managing severe leptospirosis and to refine clinical treatment guidelines.

Materials and methods. 1. Literature review of severe leptospirosis management. 2. Analysis of patient's case-record.

Results and discussion. A 31-year-old male presented to Erebouni Medical Centre in December 2023, diagnosed with the severe icteric form of leptospirosis, confirmed by real-time PCR for *Leptospira* DNA. The patient was admitted on the 6th or 7th day of illness, complaining of malaise, anorexia, fever, jaundice, and severe leg pain. Laboratory investigations revealed the following abnormalities consistent with hepatorenal syndrome: Hyperbilirubinemia, liver enzymes elevation, hypercreatinemia, lactatemia, hyperglycemia, hypoalbuminemia, anemia, thrombocytopenia, leukocytosis.

The patient was managed with methylprednisolone (iv. 500 mg daily), ceftriaxone (iv. 2.0 g daily), doxycycline (p/o 100 mg twice daily), hemodialysis, plasmapheresis (1 session).

Conclusion. Despite the presence of several poor prognostic factors, such as jaundice, thrombocytopenia, leukocytosis the patient demonstrated a favorable and rapid recovery. This case suggests that corticosteroid therapy, specifically methylprednisolone, may contribute to a reduction in mortality and a shortened recovery period in severe leptospirosis. The immunomodulatory and anti-inflammatory effects of corticosteroids may play a role in mitigating the systemic inflammation associated with this infection. However, further randomized controlled trials are essential to substantiate the effectiveness of corticosteroids in managing severe leptospirosis and to refine clinical treatment guidelines.