

Use of CytoSorb in Weil's disease due to Leptospirosis infection: a case report

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Introduction

Leptospirosis infection can lead to Weil's disease, characterized by severe jaundice, renal failure, and hemorrhage. Mortality rates can reach up to 50% in the most severe cases. Adsorption filters may be used to reduce serum bilirubin levels.

Methods

We report the case of a 52-year-old male farmer from the Ligurian hinterland who presented to the emergency department with abdominal pain, fever, jaundice, and cognitive disturbances (agitation, flapping tremor, and hallucinations). He had experienced gastrointestinal symptoms for approximately one week. An Infectious Disease Consultant evaluated him, and he was started on antibiotic therapy with Ceftriaxone 2 g/day for suspected Weil's disease. He was transferred to our hospital due to severe jaundice and renal failure (bilirubin 32.93 mg/dL, AST 139 U/L, ALT 113 U/L, creatinine 4.97 mg/dL). Dialysis treatment was initiated using continuous veno-venous hemodiafiltration (CVVHDF) anticoagulated with calcium-citrate, utilizing CytoSorb filters for a total of three dialysis cycles, each lasting 24 hours. The patient underwent a total of 18 days of continuous renal replacement therapy (CRRT).

Results

Following treatment with CytoSorb, we observed a rapid decrease in bilirubin levels [IMG 1] and an improvement in neurological status. CRRT was continued intermittently due to residual renal failure. On day 19, the patient was transferred to the Infectious Disease Unit for inpatient care. By day 29, the patient was discharged home with normal renal function and bilirubin levels.

Conclusion

The early implementation of CRRT with CytoSorb filters proved to be an effective intervention for managing hyperbilirubinemia associated with infectious diseases, as demonstrated in this case. This approach not only facilitated a rapid reduction in bilirubin levels but also contributed to significant neurological recovery and overall patient stabilization. These findings suggest that CytoSorb filters can be a valuable addition to the therapeutic strategies for severe cases of hyperbilirubinemia.

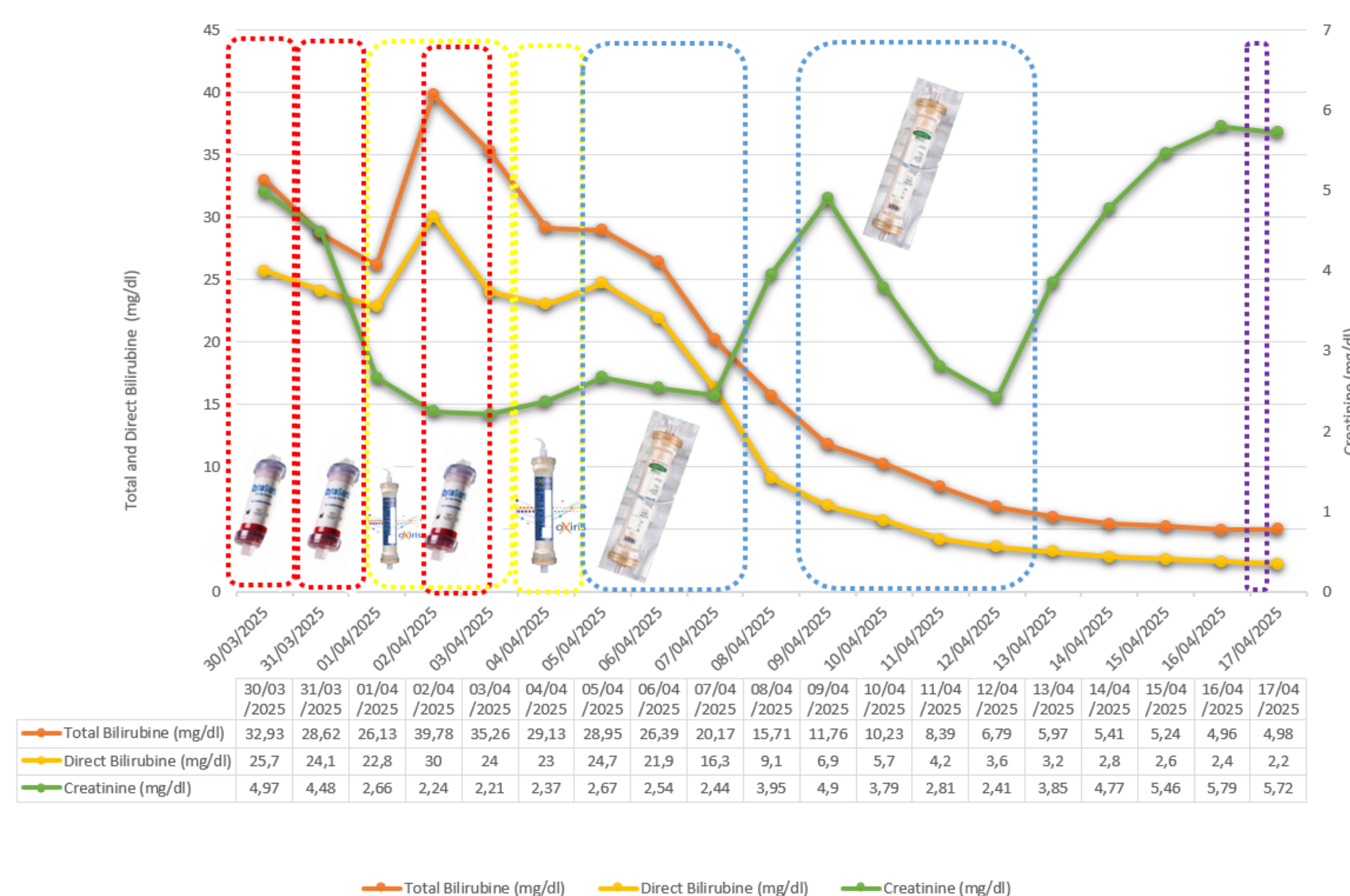


Figure 1