

Leptospirosis With Septic Emboli Causes Wet Gangrene And Complicates Bilateral Below Knee Amputation In A Young Patient – A Case Report

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Introduction

Leptospirosis is an infection caused by corkscrew-shaped bacteria called *Leptospira*. Common mode of transmission is by animal especially rodents. Severe organ-specific complications are such as acute kidney failure and pulmonary hemorrhage, which required haemodialysis and ventilator support.

Clinical Case

Here, we would like to report this 30-year-old gentleman, with no past medical illness, who presented with 3 days history of fever, multiple episodes of vomiting and diarrhoea, associated with multiple purpura lesions over bilateral lower extremities.

Further history revealed patient never exposed himself to outdoor activity recently such as jungle trekking or waterfall. Apart from deranged electrolytes and renal function, he is tested positive for leptospirosis IgM.

Without delay, he was intubated in view of worsening respiratory distress with severe metabolic acidosis. His lower limbs condition complicated with gangrene with surrounding cellulitis, where it was aggravated by the tissue ischaemia as a result from the circulatory septic emboli.

Scheduled renal replacement therapy commenced due to deteriorating renal function. Unfortunately, he required regular haemodialysis, hence the decision for bilateral below knee amputation to eliminate the source of sepsis with ongoing rhabdomyolysis.



Figure 1 : The above picture shows bilateral lower limbs wet gangrene up to the level of midfoot secondary to septic emboli.

Discussion

Leptospirosis is a worldwide zoonotic infection with a much greater incidence in tropical regions and has now been identified as one of the emerging infectious diseases. Most cases of leptospirosis are diagnosed by serology and clinical presentation. Antibodies are detectable in the blood approximately 5 days after the onset of symptoms.

In this case, patient presented in sepsis upon arrival. His general condition deteriorated despite multi-disciplinary involvement with early initiation of appropriate antibiotic. Urgent decision of major amputation over his bilateral lower extremities is crucial. Days after surgery, significant improvement was noted.

Conclusion

Several recent outbreaks of Leptospirosis have drawn attention to the potential effects of climate change and human activity on the incidence of the disease and the broad spectrum of clinical manifestation. Early initiation of antibiotic therapy is important in acute disease. This infection can lead to multiorgan system complications or even death in accidental hosts.