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Recovery from Multiorgan Failure and Septic Shock Caused by Community Acquired Burkholderia Cepacia : A Case Report

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Abstract

We describe a case of community acquired severe Burkholderia cepacia sepsis complicated by multiorgan failure in a previously healthy woman. Prompt diagnosis, targeted antibiotic therapy, and comprehensive organ support resulted in full recovery.

Introduction

Burkholderia cepacia is a rare Gram-negative pathogen usually associated with hospital acquired infections and intrinsic antimicrobial resistance. Infections may progress rapidly to septic shock and multiorgan dysfunction. The particularity of this case is that the patient was a previously healthy young lady, without comorbidities or recent hospital admissions, and the most probable source of infection was the gastrointestinal tract.

Case Presentation

A healthy young woman was admitted with septic shock and a SOFA score of 14. Her initial complains were mainly gastro-intestinal, with vomiting, loose stools and severe abdominal pain for only 1-day duration. She has not known comorbidities or recent hospital admissions. Her labs showed extremely elevated inflammatory markers (CRP and procalcitonin beyond our lab upper measuring limit) Her condition deteriorated fast and in only few hours towards multiorgan dysfunction with acute kidney failure, hepatic injury, neurological dysfunction (seizures, moderate encephalopathy), refractory shock, disseminated intravascular coagulation with severe droop in platelets levels, myocardial depression with a severely reduced ejection fraction, septic embolization with ischemic changes noticed in all fingers, toes and soles. Blood cultures confirmed Burkholderia Cepacia (sensitive to meropenem, levofloxacin, cotrimoxazole). Intensive management included mechanical ventilation, vasopressors, SLED dialysis, plasma exchange and targeted antibiotics, ischemic wounds care, finally resulting in extubation after approximal 7 days and gradual recovery of her kidney and cardiological function in the next 2 weeks.

Results

Following treatment, vasopressors were discontinued, urine output increased and kidney function returned to normal range for her age, and cardiac function normalized in the next few weeks. Laboratory recovery was evidenced by decrease in inflammatory markers, normalization of platelets levels, decrease in BNP, D Dimers, and increase in FBG. The patient was discharged stable and ambulant.

Discussion

This case illustrates that even severe Burkholderia cepacia sepsis can have a favourable outcome with early identification and multidisciplinary management. Clinicians should suspect this organism in persistent Gram-negative sepsis unresponsive to standard therapy.

Conclusion

Early organism-specific antibiotic therapy and aggressive organ support are essential for recovery from Burkholderia cepacia-induced multiorgan failure.

References

1. Mahenthiralingam E, et al. (2005). Burkholderia cepacia complex infection: epidemiology, pathogenesis and treatment. *Clin Microbiol Rev, 18*(4), 755-789.
2. Sousa, S. A., Ramos, C. G., & Leitão, J. H. (2011). Burkholderia cepacia complex: emerging multidrug resistant pathogens. *Pathogens, 1*(1), 9–29.