Clostridium Difficile, a Common Infection with a Rare, Fatal Complication

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INTRODUCTION

Clostridium difficile colitis commonly encountered infection in the hospital and community. Extraintestinal manifestations of C. difficile are rare with high mortality, and few cases of C. difficile bacteremia have been reported in the literature.

CASE PRESENTATION

A 34-year-old woman with history of multiple abdominal surgeries, recurrent small bowel obstruction and recent C. difficile colitis presented with abdominal pain and altered mental status. Her abdominal exam revealed diffuse tenderness and she was taken to the operating room with an intraoperative finding of healthy bowel. Postoperatively she developed septic shock and acute respiratory distress syndrome and she was covered with broad-spectrum antibiotics. Three days after admission, her blood cultures were positive for Clostridium difficile and her antibiotics were switched to oral/rectal vancomycin and IV metronidazole. After developing refractory shock and lactate elevation to 14.9 she was taken again to the operating room where a small perforation was identified. Despite addition of Tigecycline and fungal coverage she continued to decline clinically and after her third abdominal surgery with finding of friable bowel, her family withdrew care and the patient died.

DISCUSSION

Clostridium difficile bacteremia is a rare entity, but of the reported cases a number of risk factors have been identified. Such factors include malignancy, recent antibiotic use, alcohol abuse and abdominal surgery. When encountering patients with septic shock, standard of care includes starting broad-spectrum antibiotics, which was done in our patient. However, in patients with one or more of the above predisposing factors, C. difficile bacteremia should also be considered. From review of literature, symptoms are nonspecific and include abdominal pain and fever. Such generic symptomatology can delay appropriate care such as our patient who did not receive appropriate antibiotics until day three when her blood cultures returned positive. Had our patient received appropriate treatment for her bacteremia from the outset it is unclear how this might have changed the outcome. However, given high degree of fatality, early recognition of C. difficile bacteremia is imperative.

IMPLICATIONS

- Clinical suspicion and early treatment of potential Clostridium difficile bacteremia is critical.
- Due to the high mortality even with current treatments, further research to determine appropriate antibiotic or other therapy would be beneficial.