Flavimonas Oryzihabitans: Not your typical organism in a patient with chronic liver disease



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Introduction

- Flavimonas Oryzihabitans is an organism typically found in rice paddies, stagnant water, and soil
- Very few cases as a human pathogen described in literature
- Seen in infections associated with catheters, respiratory therapy, mechanical ventilation, and other instrumentation in immunocompromised patients, particularly those with neoplastic conditions
- We describe a rare case of bacteremia by F. Oryzihabitans as a suspected contributor to the decompensation of a chronic liver disease (CLD) patient

Case Description

41-year-old incarcerated male with PMH of cirrhosis, HIV (2010) on HAART, hypertension, and Hepatitis C (2017), presents to the ED with fatigue, abdominal pain and distention, and altered mental status. History was mostly from the correctional report due to altered mental state. He began experiencing abdominal pain and subjective fevers 2 days prior with associated nausea and constipation several days prior. Other symptoms included a 10lb weight loss in the past 2 months, orthopnea, leg swelling, easy bruising and slurred speech. Notably, he had a remote history of IVDA use. PE was remarkable for slurred speech, confusion, lower extremity pitting edema, hematomas in all extremities, mild abdominal distension, and abdominal pain with palpation.

Results and Management

- Labs: leukopenia, predominant mild neutropenia (ANC 1042), lymphopenia (ALC 486), normocytic anemia, thrombocytopenia and borderline direct hyperbilirubinemia
- Imaging: Abdominal US and Abdominopelvic CT scan (Figure 1) showed splenomegaly, mild to moderate amount of ascites, colonic thickening, edema, and fat stranding suggestive of typhlitis versus changes of portal hypertension colopathy
- *Management:* Paracentesis was not performed due to lack of a safe, viable pocket. Blood cultures revealed the gram-negative bacillus, F. Oryzihabitans
- *Treatment:* Piperacillin/tazobactam was started to complete 14 days of therapy
- Patient was discharged with significant improvement

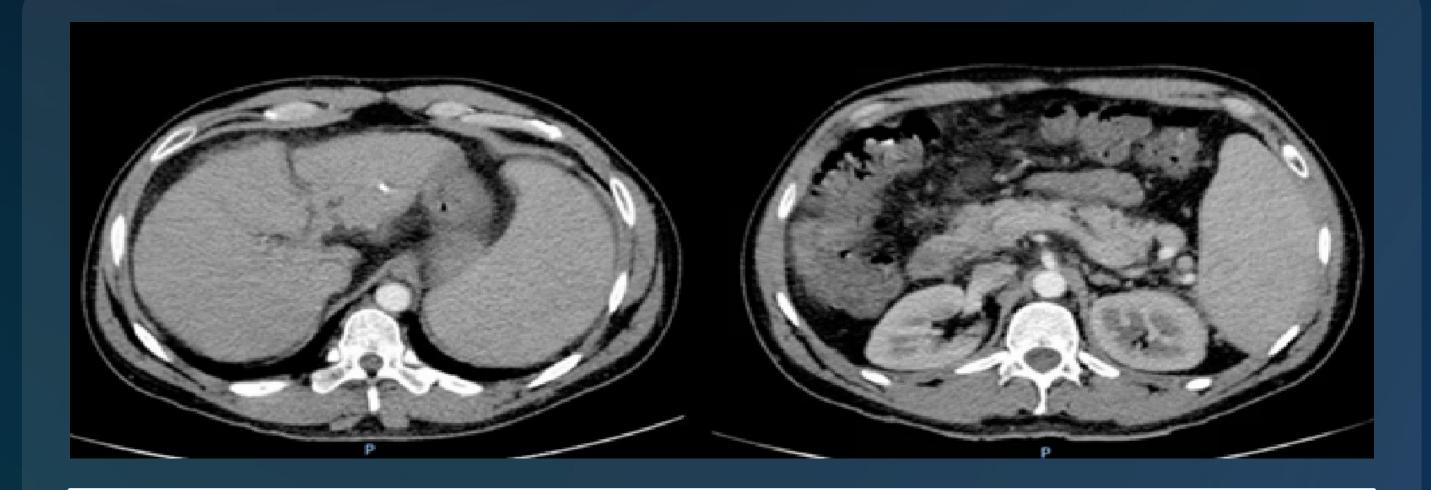


Figure 1. Abdominopelvic CT scan with IV contrast demonstrating splenomegaly, free peritoneal fluid, colonic thickening, edema, and fat stranding

Discussion

F. Oryzihabitans, although extremely rare, has been implicated in infections of immunocompromised patients. A history of HIV, with no known CD4 count, and CLD status may be elements to regard an immunocompromised state. It may also be plausible to consider organisms such as this as contributing factors for spontaneous bacterial peritonitis or decompensated CLD in resource limited settings and marginalized populations with the aforementioned conditions.

References:

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