Unraveling a Rare Complication of Perirectal Abscess in a Patient with Decompensated Alcoholic Cirrhosis

Introduction:

In patients with alcoholic cirrhosis and ascites, peritonitis is the most common infection. Spontaneous bacterial peritonitis (SBP) accounts for more than 95% of the cases and less than 5% are due to secondary bacterial peritonitis.

Case Presentation:

A 58-year-old male with a history of alcohol abuse and IV drug use presented with complaints of increasing abdominal distention for the past month and increased bilateral pedal edema for 2 weeks. The patient was febrile (temp 101.4 F) and tachycardic (Heart rate 110/min) upon presentation. Labs revealed total bilirubin 4.4mg/dl, direct bilirubin 2mg/dl, albumin 1.8mg/dl, ALT 76IU/L, AST 68IU/L, and positive Hepatitis C antibody. CT abdomen and pelvis showed moderate ascites, cirrhotic hepatic capsule, portal venous hypertension, multiple varices, and lobulated left perirectal hypodense lesion (2.2 x 3 cm). IR-guided paracentesis resulted in the removal of 3200 ml of straw-colored fluid. Peritoneal fluid analysis showed WBC 4069, fluid albumin <1.5g/dl, protein <3g/dl, and LDH 91IU/L with gram stain and culture showing few E. coli. Treatment for presumed SBP was initiated with ceftriaxone and metronidazole. MRI Pelvis confirmed a large perirectal abscess but given the increased risk of mortality, the perirectal mass was not operated upon or drained by IR. Final peritoneal fluid cultures grew two different E. coli species resistant to Ceftriaxone but sensitive to Piperacillin Tazobactam. Given the confirmation of the rectal abscess and growth of multi-drug resistant E. coli species, Secondary Bacterial Peritonitis was diagnosed. Meropenem was started for 2-3 weeks with interval repeat imaging to monitor for resolution of abscess. Unfortunately, a follow-up imaging of the peri-rectal abscess was not performed as the patient transitioned to end of life care.

Discussion

This case contributes to the spare literature on secondary bacterial peritonitis, which has a much higher mortality rate of up to 60-80%. It is mostly managed with anaerobic coverage with antibiotics and source control with surgery. Given higher mortality and differences in management from SBP, it is important to recognize secondary bacterial peritonitis early and manage it timely.