

SPONTANEOUS CANDIDA PERITONITIS

H.S.Hira, Punit Pruthi, Didar Singh, Yasir S. Rizvi

Department of Medicine, Maulana Azad Medical College and Assoc. Lok Nayak Hospital, New Delhi - 110002, India

Abstract : Spontaneous fungal peritonitis caused by candida albicans is very rare. A middle aged male who was a known case of chronic pancreatitis and chronic liver disease presented in hepatic encephalopathy. On investigations he was diagnosed to be suffering from peritonitis caused by candida albicans with no evidence of bacterial infection. There are very few case reports of spontaneous candida peritonitis in this literature.

CASE REPORT

A 43 year old male, chronic alcoholic for the last 20 years, was a known case of chronic alcoholic pancreatitis for the year. The patient was operated for pancreatic pseudocyst (cystogastrostomy was done) 1 year back. During work-up he was incidentally diagnosed as having cirrhosis with portal hypertension. Ascites was not present at that time and patient never had any complication due to cirrhosis. He was on irregular pancreatic enzyme supplements.

This time he presented with the history of pain in abdomen of 4 days duration which was diffuse, non-colicky, continuous, not aggravated by meals. There was no history of vomiting or loose stools. Pain was associated with distension and constipation. Patient was in altered sensorium for last one day before admission, without any focal neurological deficit. There was no history of fever, jaundice, upper GI bleed or any recent drug ingestion. On examination his vitals were stable, there was mild pallor and mild pedal edema. There was no icterus. His chest and cardiovascular system examination were unremarkable. His per-abdomen examination revealed free fluid with normal bowel sounds. There was no organomegaly. His CNS examination revealed grade III encephalopathy.

On investigating the patient, his hemoglobin was 10 gm%, total leukocyte count (TLC) was 10,500 with differential count of 90% polymorphs and 10 % lymphocytes. His blood sugar was 87 mg %, blood urea 45 mg/dl, S. Creatinine 1.2 mg/dl, serum electrolytes were within normal range. His total bilirubin was 0.9 mg/dl, ALT – 38 (normal 20-40), AST – 46 (normal 20-40), alkaline phosphatase 10 KAU (normal < 13), serum total protein 4.8 gm % and serum albumin 2.4 gm % , serum amylase 31 Units. Ascitic tap was turbid with TLC - 16000, $DLC P_{80} L_{20}$, protein 1.2 gm % and sugar was 10 mg %. Gram staining revealed numerous Candida (yeast form), AFB staining was negative. His HIV 1 & 2 were negative. Awaiting ascitic fluid culture for bacteria and fungus he was started on intravenous ceftriaxone, intravenous fluconazole and supportive treatment. Amphotericin was avoided in view of poor general

Correspondence : Dr. Yasir S. Rizvi, 2, Doctors Apartments, Vasundhara Enclave, Delhi – 110096. e-mail : rizvis_2000@yahoo.com

condition and bilateral hydronephrotic kidneys found on ultrasound examination which also revealed coarsened echotexture of liver with irregular surface and moderate ascites . Pancreas could not be assessed because of bowel gas. Ascitic fluid culture revealed dense growth of candida albicans (both hyphae and yeast form), bacterial culture was sterile. In spite of treatment, his condition deteriorated with worsening of renal function and oliguria. Patient went in hypotension and was started on inotropic support, he could not be saved.

DISCUSSION

Spontaneous peritonitis caused by candida albicans is extremely rare. Search of literature revealed only 4 reported cases : two with liver cirrhosis secondary to hepatitis B¹ and two with alcoholic cirrhosis^{2,3}. There is only one previous case report³ of candida peritonitis in alcoholic cirrhosis who also had alcoholic pancreatitis and this is the second case report. There is a single case report of spontaneous fungal peritonitis caused by candida glabrata in a cirrhotic patient⁴. Candida albicans is not uncommonly found in patient with history of previous surgical procedure or who are on peritoneal dialysis³. In the present patient surgery was performed 1 year back and it may be postulated that candida gained entry during the procedure , lying dormant till host immunity decreased and then causing peritonitis. Finding of neutrocytic ascites with sterile bacterial culture and culture positive for a single fungus along with immunocompromised state (chronic alcoholic with cirrhosis and pancreatitis) with past history of surgical procedure goes in favour of candida peritonitis rather than non-pathogenic contaminant⁵.

REFERENCES

1. de Luis D, Aller R, Boixeda D, Meseguer M, Bermejo F, Martin de Argila C. Spontaneous peritonitis caused by ascitic fluid with Candida albicans. Rev Clin Esp. 1997 Jul;197(7):500-1.
2. Suarez A, Oero L, Navascves CA et al. Ascitic peritonitis due to candida albicans. Rev. Esp. Enferm. Dig. 1994, 86, 691-3.
3. Yang C, Yeh CT, Hung CF, Liaw YF. Case report: spontaneous peritonitis caused by Candida albicans. J Gastroenterol Hepatol. 1999 Oct;14(10):1041-4.
4. Nair S, Kumar KS, Sachan P, Corpuz M. Spontaneous fungal peritonitis (Candida glabrata) in a patient with cirrhosis. J Clin Gastroenterol. 2001 Apr;32(4):362-4. Bayer AS, Blumenkrantz MJ, Montgomerie JZ, Galpin JE, Coburn JW, Guze LB. Candida peritonitis. Report of 22 cases and review of the English literature. Am J Med. 1976 Dec;61(6):832-40.

Future Special Issues/ Symposia

Special Issues :

- Interventional Radiology: Current Trends
- Challenges of Diabetes in the Developing World
- Organ Transplantation: Current Scenario
- Advances in Neuro Surgery
- Obesity: New Challenges

Symposia :

- Sexually Transmitted Diseases Current Scenario
- Prevention of Chronic Kidney Disease
- Metabolic Bone Disease : An update
- Advances in surgical Oncology
- Advances in Endourology