



ORIGINAL RESEARCH PAPER

General Surgery

A RARE CASE OF PERITONITIS DUE TO ULCERATIVE AMOEBIC COLITIS- CASE REPORT

KEY WORDS: Colonic perforation, Fulminant Amoebic colitis FAC, Peritonitis.

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ABSTRACT

ULCERATIVE AMOEBIC COLITIS is a rare complication of amoebiasis that is associated with high mortality. Only 1 to 4 cases are seen per year in India & only few such cases have been reported. This requires early diagnosis and surgical intervention. We recently cared for a patient who presented with acute abdomen with history of Abdominal pain, Fever, Obstipation. Before presenting to our institution he was admitted at outside private hospital for 2 days in view of **Left Diabetic FOOT** with **ACUTE KIDNEY INJURY** with **SEPSIS** and was treated conservatively. On emergency exploration, **MULTIPLE CAECAL PERFORATIONS** with extensive necrosis of Ascending COLON were seen. **SEGMENTAL RESECTION OF 5 CM TERMINAL ILEUM, CAECUM, ASCENDING COLON and 5 CM TRANSVERSE COLON was performed.** Postoperative course was marked by septicaemia and multi-organ failure followed by death. This case report emphasizes the importance of early diagnosis and treatment of acute AMOEBIC COLITIS and associated high mortality.

INTRODUCTION:

Amoebiasis is a parasitic infection common in under developed countries and among populations with low socio-economic status with poor sanitation. Causative organism is a protozoon; Entamoeba histolytica, that principally affects colon and liver. Around 100,000 people die each year worldwide from amoebic colitis and amoebic liver abscess.

The majority of infested humans with intestinal illness remain asymptomatic. However, very uncommonly the disease takes a fulminant super-acute course because of development of Necrotizing Amoebic Colitis, which has very high mortality ranging from 55% to 100% if diagnosis and treatment is delayed. Diagnosis is difficult and frequently confused with inflammatory bowel disease leading to wrong treatment with steroids with devastating results.

Perforation is common in FAC, and peritonitis is the commonest cause of death. Primary total resection of involved segment and exteriorization of the proximal & distal transected ends & bowel reconstruction 3-6 months later is the treatment of choice. Also the literature favors early presumptive antiamoebic treatment in case of severe and undiagnosed colitis in endemic areas.

Case Presentation

A 54 year old INDIAN MUSLIM patient resident of Hyderabad came to Emergency Room with chief complaints of Pain abdomen since 3 days which is sudden in onset and is of colicky type later progressed to diffuse and continuous type. Initially pain was in Right hypochondrium & later became diffused abdominal pain which is aggravating on body movements and relieved on lying supine and patient has history of Obstipation & nausea for 3 days, Low grade fever with Chills since 3 days.

Before coming to our hospital patient was admitted at outside private hospital for 2 days in view of **Left Diabetic FOOT** with **ACUTE KIDNEY INJURY** with **SEPSIS** & was treated conservatively. He is a chronic alcoholic and toddy intaker, smoker and known case of Diabetes under medication since 12 yrs. On examination patient had Pulse rate of 110/min, BP-100/90 mm hg, Tenderness and Guarding all over the abdomen. On Per Rectal examination, Rectum was empty and examining finger was stained with yellow colored stools.

Intravenous antibiotics in the form of a combination of ceftriaxone and metrogyl were started & patient was taken for exploratory laparotomy.

Intraoperatively -

MULTIPLE CAECAL PERFORATIONS largest measuring 1.0cm *1.0cm with omentum adherent to caecum and ascending colon with extensive necrosis of Ascending COLON with 500ml of Pyoperitoneum.

Segmental Resection Of 5 Cm Terminal Ileum, Caecum, Ascending Colon And 5 Cm Transverse Colon Was Performed.

Postoperative was complicated by septicaemia and multi-organ failure followed by death on **POSTOPERATIVE DAY-1.**

Clinical Course :

BLOOD TESTS	Hb -5.8gm% WBC - 19400/cmm PLC - 2.40X 106/mm3 Creatinine - 2.1 mg/dl RBS - 220 mg/dl Na+/K+ - 131/2.9 mEq/l
X-RAY ERECT ABDOMEN	Air under diaphragm
USG ABDOMEN	G 1 fatty liver with moderate ascites, Thickened ascending colon wall with maximum thickness 6.1mm



Fig 1.PERFORATION SITE:In the caecum of size 1.0*1.0cm, 12cm from terminal ileum.

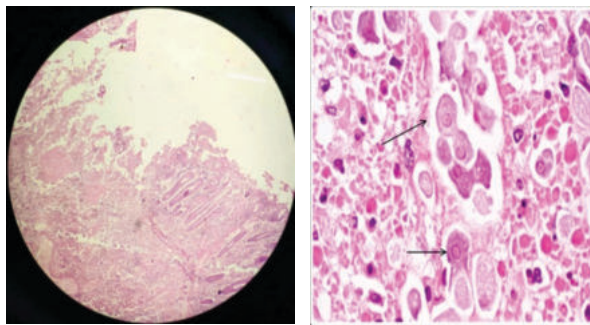


Fig 2. Gross Features Of Intestinal Segment Measuring 44cms.

Identified as Terminal Ileum with Caecum, Ascending Colon and Proximal Transverse Colon along with attached Mesentery.

External Surface:

Congestion and Areas of necrotic purulent exudate noted.



Histopathological Examination of resected bowel shows Areas of ulceration, Extensive areas of Necrosis, Mixed inflammatory cell infiltrate (Lymphocytes, Neutrophils, Plasma cells, Histiocytes)

Sections of Perforated Sites Showed Trophozoites of Entamoeba Histolytica

DISCUSSION:

Entamoeba histolytica; the causative organism of amoebiasis, is a protozoan parasite which affects Gastrointestinal tract and Liver. Gastrointestinal involvement occurs as a result of ingestion of the cysts of the parasite from food or water contaminated with faeces. The cysts are digested in the intestinal lumen releasing trophozoites. The trophozoites form cysts which are excreted in the faeces to start a new cycle. Amoebiasis may involve any part of the bowel, but it has a predilection for the cecum and ascending colon, may present as asymptomatic infection or symptomatic non-invasive infection, acute proctocolitis (dysentery) to fulminant colitis with perforation. The majority (90%) are asymptomatic but 6%-11% of patients are with symptomatic infection, the most virulent host response to the amoebic infection occurs leading to fulminating reaction, that leads to necrotizing colitis, perforation, peritonitis, and death. Such course of amoebiasis in the form of acute fulminant necrotizing amoebic colitis (FNAC) which are associated with various factors including male gender, age over 60 years, associated liver abscess, progressive abdominal pain, and signs of peritonitis, leukocytosis, hyponatremia, hypokalemia, and hypoalbuminemia. Peritonitis develops

either because of frank perforation or slow leak through an extensively diseased bowel. Fulminant amoebiasis is difficult to diagnose and treat & associated with very high mortality rate. Diagnosis is often confused with idiopathic inflammatory bowel disease resulting in misadministration of steroids. Colonoscopic appearance and colonic tissue biopsy are helpful in differentiating amoebiasis from other forms of colitis. Antigen detection both in the patient's stool and serum is more sensitive and specific method. Pathology of the invaded colonic tissue shows transmural inflammation widespread necrosis along with large numbers of amoebic trophozoites within the inflammatory exudates. For acute amoebic colitis, early diagnosis and aggressive supportive and anti-amoebic treatment should be instituted. If fulminant colitis develops, the outcome is poor with mortality ranging from 55% to 87.5% peritonitis being the commonest cause of death.

CONCLUSION:

In this study, we report a case of amoebic ulcerative colitis with signs of peritonitis who underwent emergency laparotomy for multiple ceecal perforation but patient died despite of surgery.

Amoebic colitis causing colonic perforation incidence is higher in areas with poor overall health status and where portable water is not always available. It mimics Inflammatory bowel disease or Colon carcinoma. Even with aggressive management, the prognosis of such patients is poor. Resection of diseased bowel is the treatment of choice. Definitive diagnosis is histopathology of the surgical specimen. The key message is to emphasize the possibility of acute necrotizing FAC as a rare complication of amoebiasis, and poor outcome associated with misdiagnosis and use of steroids. Early recognition and anti-amoebic treatment such as Tab Metronidazole 800mg TID or Injection Metronidazole 500mg IV TID for 10 to 14 days (40mg/kg/day) along with urgent aggressive resectional surgery with exteriorization of the proximal and distal bowel ends, are needed to reduce mortality from acute fulminant necrotizing amoebic colitis.

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