

Simultaneous Amoebic Caecal Perforation with Ruptured Liver Abscess - a Rare Presentation

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Citation

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Abstract

Simultaneous amoebic caecal perforation and amoebic liver abscess rupture is a rare complication of invasive amoebiasis with a higher rate of mortality. Though conservative management is the mainstay of treatment for well-contained caecal perforation, surgical exploration is sometimes needed for free perforation or full-thickness gut necrosis. Amoebic liver abscess rupture always needs some form of drainage. We report a rare case of amoebic caecal perforation with ruptured liver abscess.

INTRODUCTION

Trophozoites of *Entamoeba histolytica* usually invade interglandular tissue of the crypts of Lieberkuhn and burrow through the mucous membrane to lodge in the submucosal plane for multiplication, producing bottle-neck ulceration. Complicated invasive forms may cause amoebic liver abscess with rupture, full-thickness colonic necrosis, pericolic abscess and, rarely, free perforation.

CASE REPORT

A 35-year-old normotensive, non-diabetic shopkeeper presented with fever and right lower abdominal pain of one week duration. Physical examination revealed tenderness and guarding in the right iliac fossa, simulating appendicular perforation. Routine investigations revealed leucocytosis, and normal renal and liver function tests. X-ray of the abdomen showed no free air under the diaphragm. Ultrasonography of the abdomen revealed free fluid in the peritoneal cavity. A provisional diagnosis of appendicular perforation was made and the patient was taken up for emergency exploration. Laparotomy revealed caecal perforation with patchy caecal wall necrosis (figure 1), ruptured liver abscess (figure 2) at its inferior surface and minimal peritoneal contamination.

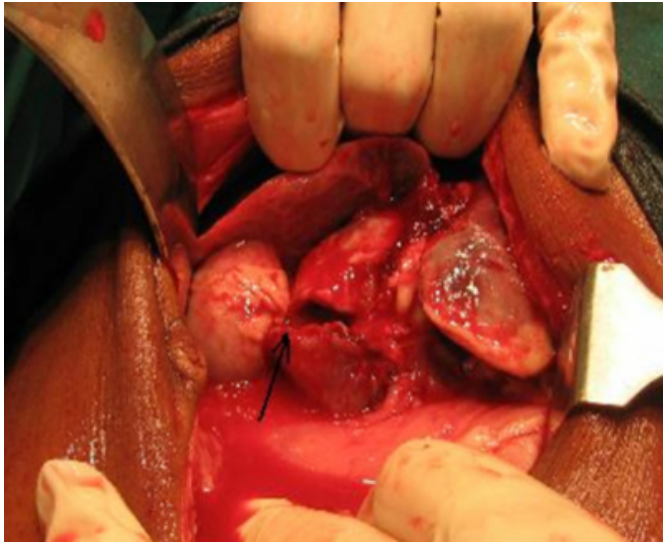
Figure 1

Figure 1: Resected specimen showing patchy necrosis of caecum



Figure 2

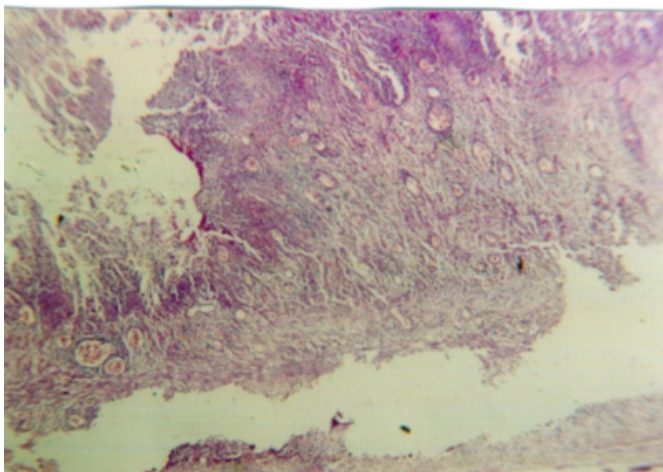
Figure 2: Operative photograph showing ruptured amoebic liver abscess



Right hemicolectomy with primary ileo-transverse anastomosis and peritoneal toileting with tube drainage of the liver abscess cavity was performed. Postoperatively, the patient was managed by broad spectrum antibiotics and metronidazole. The drain was removed on the 10th postoperative day and the patient was discharged on the 12th postoperative day. Histopathological examination of the specimen showed amoebic ulcers of caecum and ascending colon with transmural involvement (figure 3).

Figure 3

Figure 3: Histopathology (low power) showing transmural involvement by amoebic ulcers



DISCUSSION

Trophozoites of *Entamoeba histolytica* usually invade mucosa and submucosa of colon. But in certain cases, particularly in malnourished, alcoholic or diabetic patients or in those with poor immune status, this invasion may reach up to muscle layer and serosa causing silent perforation often involving caecum.¹ Luvuno et al. showed that transmural necrosis of colonic wall was due to thrombotic occlusion of vessels supplying that segment of gut wall.²

The presentation of amoebic caecal perforation may vary from well contained abscess to faecal peritonitis with or without concomitant hepatic abscess or fulminant colitis. Traditionally, the treatment option was faecal diversion. FC Eggleston et al. documented a study of 26 patients with amoebic colonic perforation with 71% mortality in the resection group and 43% mortality in the faecal diversion group. All of the 6 patients with concomitant liver disease died.³ But Hasan et al. showed that in patients with well contained disease or minimal faecal peritonitis, resection of caecum with primary ileo-colic anastomosis could offer comparable results.⁴

In our case, considering the favorable parameters of the patient like minimal peritoneal contamination, little evidence of sepsis and no organ dysfunction, we performed resection of caecum and primary ileo-colic anastomosis along with tube drainage of the concomitant liver abscess cavity yielding an uneventful recovery.

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