

# A Rare Case of Amoebic Liver Abscess with Caecal Perforation in a Young Lady

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## ABSTRACT

Amoebic colitis is one of common infection in all groups of people in almost all geographical areas. Routinely it is easily treatable disease, but it can get complicated and then prognosis is poor. Amoebic liver abscess is a common complication of amoebiasis but along with caecal perforation it carries worst prognosis. No survivor has been documented in the available literature, and the results are same in our study.

**Keywords:** Amoebic colitis; Liver abscess; Entamoeba Histolytica; Caecal perforation; Trophozoite.

## INTRODUCTION

Amoebiasis is one of common parasitic infection among all socioeconomic groups of patients and regions. Mostly patients are asymptomatic (~80%), while around 20% have symptomatic diseases which can manifest as diarrhea, colitis, liver abscess etc.

Amoebic liver abscess is commonest manifestation of extra colonic amoebiasis, and accounting for maximum deaths related to it.<sup>[1,2]</sup> Organism travel via portal vein and reaches liver and form liver abscess, this abscess may rupture into peritoneal cavity, pleural cavity and pericardial cavity. Around 6-9% cases has been reported to have rupture into intra peritoneal cavity.<sup>[3]</sup> Bowel perforation from amoebiasis is very rare,<sup>[4]</sup> and to have both simultaneously is very rare.

## CASE REPORT

A 20 years old lady was brought to the hospital emergency department in with complaint of pain abdomen, which started insidiously 15 days back and now progressed to diffuse abdominal pain, distension and failure to pass flatus and stool for 2 days. No history of fever, vomiting, loose stool, blood in stool or any other medical comorbidity.

On examination-she was conscious but drowsy, responding to verbal command, her pulse-110-120/mint, B.P- 90/50 mm of Hg, Respiratory rate-32/mint. Chest examination- suggestive of decreased air entry on right side.

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Per abdomen-distended, tensed,

Per abdomen-distended, tensed, diffusely tender, bowel sound were absent. USG whole abdomen was done one day prior to hospital admission which revealed – hepatomegaly with ruptured liver abscess, circumferential thickening of caecum and right pleural effusion.

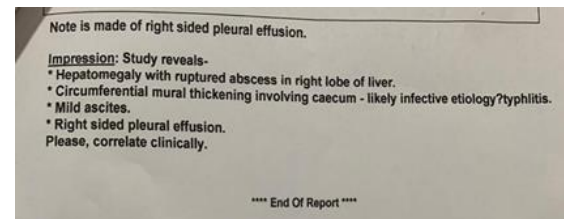


Figure 1: USG report –prior to admission



Figure 2: Intra op ruptured liver abscess



Figure 3: Perforated caecum

Initial diagnosis of ruptured liver abscess with peritonitis was made. Patient resuscitated with i.v. Fluids, routine investigations were sent. In view of deteriorating condition, she was shifted for emergency laparotomy after Pre anesthetic checkup. On exploration-rupture liver abscess with peritoneal collection (~500 ml) pus with bilious fluid was found which was drained, a large caecal perforation (4x3 cm) was noted with devitalized tissue. Drainage of abscess along with limited right hemi colectomy was done. Ileostomy and distal mucus fistula brought out. After thorough wash 2 drains placed and abdomen closure done. Specimen sent for histopathological examination which revealed amoebic abscess on colonic wall and serology is positive for Entamoeba Histolytica. Post op period she was kept in ICU where she was monitored and appropriate treatment given as discussed with multidisciplinary team. Her condition did not improve and she succumbed to death after 3 days post operatively.

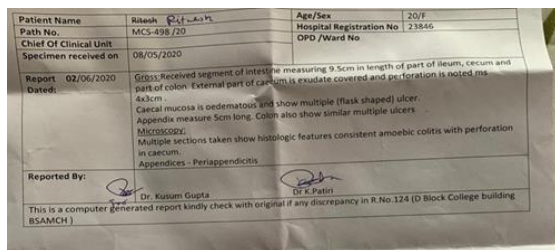


Figure 4: Histopathology report

## DISCUSSION

Entamoeba Histolytica is primarily intraluminal parasite of large intestine. Humans get infected by ingestion of amoebic cyst which goes to small intestine and then large intestine where they form Trophozoite stage which invades the intestinal wall. Mostly these lesions are located in large intestine or may be in terminal ileum, usually localized where colonic flow is slow. Initial lesions are pin head like, followed by mucosal edema and central necrosis it invades to deeper layers of intestine and form ulceration which is mainly localized to mucosa and lamina propria layer, then progressed to deeper muscularis propria layer and grows along the wall of intestine and laterally, appearing as flask like ulcers. Sometimes these ulcers progressed beyond muscularis layer and penetrate through the intestinal wall. Perforation commonly seen in caecum.<sup>[5]</sup>

Liver abscess is commonest extra-intestinal manifestation of amoebiasis characterized by right upper quadrant pain, fever, nausea, hepatomegaly etc. Liver abscess is most commonly located in right upper lobe, may be single or multiple. As the disease progress area of necrosis increases, center liquefies and which contain sterile and non-pyogenic chocolate colored pus (Anchovy pus).

The incidence of intra-peritoneal rupture of liver abscess is about 6-9%. Both liver abscess rupture

and caecal perforation occurring together is very rare. Mukherjee et al and Prajapati et al documented similar cases in which patient died after 2 days post-operatively.<sup>[6,7]</sup> Eggleston et al studied 26 cases of bowel perforation out of which 6 has un-ruptured liver abscess, all of them died after surgery.<sup>[8]</sup>

For amoebic colitis treatment of choice is Metronidazole given for 5-10 days, for luminal phase of parasite Iodoquinol, Diloxanide furoate and Paramomycin are used.

In our case general condition of patient was poor at presentation. She presented late may be due to fear of CORONA virus infection which accelerate the poor prognosis.

## CONCLUSION

Simultaneous presentation of burst liver abscess with caecal perforation is extremely rare and carries grave prognosis with almost 100% mortality.

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