INTRODUCTION

Amoebic liver abscess is a common inflammatory space-occupying lesion occurring in the liver, in developing countries. Caused by the protozoan, *Entamoeba histolytica*, this condition is the most common extra intestinal manifestation of amoebiasis.1 Occurring more commonly in tropical countries, it is prevalent in the lower socioeconomic strata due to poor hygienic conditions. Males in the fourth to fifth decade are more commonly affected. Higher incidence in males is also attributed to alcoholism. Localized right upper quadrant abdominal pain and fever (either continuous or spiking) are the most consistent presenting symptoms of amoebic liver abscess.2

The diagnostic difficulties are attributed to its highly variable presentation such as anorexia, malaise, cough due to diaphragmatic irritation and jaundice. The combination of ultrasonographic findings with clinical features and aspirate analysis aid in the diagnosis. Imaging studies reveal predominance of the right lobe involvement with a hypoechoic space occupying lesion. Amoebicidal agents are the main modality of treatment with percutaneous drainage, which is highly subjective.3

If left untreated, this can result in various complications such as pulmonary effusion, atelectasis and rupture into pleura causing empyema, or the peritoneal cavity causing generalized peritonitis. Rarely the abscess may form a fistulous communication with the gut. This is most commonly observed to be to the duodenum when there is a rupture of a liver abscess. There may also be an abnormal duodeno-biliary communication in these cases. Recently, hepato-enteric fistulae are also found in conjunction with radiofrequency ablation (RFA), a frequently used modality in the treatment of hepatocellular carcinoma. There have been sporadic case reports of this hepato-enteric communication occurring to the colon. Hepato-enteric fistulae without RFA have not been reported since the 1990s possibly secondary to better treatment of liver abscess.
revealed a distended abdomen with mild diffuse tenderness with no other features of peritonitis or organomegaly.

Complete blood picture revealed the leukocytosis with neutrophilia (16000/mm$^3$) with anemia (hemoglobin 6 g%). Liver enzymes were moderately elevated with normal bilirubin values. Striking hypoalbuminemia (albumin - 2 g/dl) was noted and the generalized edema was attributed to chronic liver disease. Erect X-ray of the abdomen revealed an air fluid level in the right upper quadrant, possibly suggesting an air containing liver abscess. Ultrasound scan of the abdomen was performed, in which two hypo echoic lesions each with the volume of 400 ml was present in the right lobe of the liver.

Ultrasound guided aspiration of contents was of typical anchovy sauce in appearance with few chronic inflammatory cells. Aspirate was negative for Gram-stain and acid fast bacilli. Further confirmation was done with stool examination for ova and cyst, with immunoassay such as enzyme-linked immunosorbent assay. Ascitic fluid analysis was transudate in nature. Patient received metronidazole for 2 weeks. Blood transfusions with high protein supplementation improved his general condition. With the passage of time, his abdominal distension settled but he gave a history of passing greenish colored stools with intermittent fever. Contrast enhanced computed tomography scan of the abdomen was performed for further evaluation which brought to our notice, a fistulous communication between one abscess cavity and the hepatic flexure of colon with passage of contrast into the cavity (Figure 1). This was further confirmed with contrast magnetic resonance imaging (Figure 2).

Patient was managed conservatively with a broad spectrum antibiotics (piperacillin with tazobactum) and duration of metronidazole was extended. He was also given luminal amoebicide, diloxanidefuroate for 10 days. Colonoscopy was performed to rule out features of inflammatory bowel disease, a common cause of enteric fistula. This revealed a fistulous opening at the hepatic flexure with signs of healing with no other mucosal abnormality (Figure 3). Patient recovered with conservative treatment and is on regular follow-up.

**DISCUSSION**

Liver abscess is one of the most common causes of abdominal pain that we come across predominantly in tropical countries. India is an endemic zone for *E. histolytica* infection, and amoebic liver abscess is the commonest extra intestinal manifestation of amoebiasis. It is more common among adult males who are chronic alcoholics. Amoebic liver abscess complicates the asymptomatic colonic infection more often than its symptomatic counterpart. Due to its atypical presentation, as also the case in this patient, diagnosis becomes challenging.

Various complications occur if the patient presents late or if the diagnoses are delayed, commonly being
pleuro-pulmonary. Rupture of the abscess into the peritoneum is the another complication we come across in our setting. Development of the fistulous tract is a rare entity, especially into the colon. Our patient developed a spontaneous rupture of an abscess into the hepatic flexure forming a fistulous tract, a very rare complication encountered in the present day scenario that is presently being reported following RFA for hepatocellular carcinoma.

Other predisposing condition such as inflammatory bowel disease or foreign body or interventional procedure must be ruled out in such a setting. Hence, such a condition can be managed conservatively with amoebicidal agents for 4-6 weeks with broad spectrum antibiotic coverage and adequate nutritional support on occurrence of asymptomatic spontaneous hepato-colic fistula.

CONCLUSION

Hepato colic fistula is a rare entity encountered with liver abscess. They generally tend to resolve spontaneously or with conservative management. A high index of suspicion is required to pick up such uncommon presentations of common diseases so that outcomes may be optimized in these cases.

REFERENCES


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