



General surgery

A RUPTURED AMOEBIC LIVER ABSCESS MASQUERADING AS PSEUDOCYST OF PANCREAS

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ABSTRACT A ruptured Amoebic liver abscess presenting as pseudocyst of the pancreas is unheard of. We present a 50-year-old male who presented to the emergency department with a history of jaundice and fullness of the abdomen. On examination, the patient was icteric and had a palpable lump in the epigastric region, leading to a clinical diagnosis of pseudocyst of the pancreas given the patient's history of chronic alcoholism. Imaging studies were suggestive of liver abscess and pseudocyst of the pancreas creating a diagnostic dilemma. A defect was seen in the liver abscess wall with the extension of collection in the lesser sac through the foramen of Winslow, thus establishing the diagnosis of ruptured liver abscess with collection in the lesser sac. Liver abscess was pigtailed which also drained the lesser sac collection through the defect. The patient improved clinically post pigtail.

KEYWORDS : Liver abscess, pseudocyst, pigtail

Introduction

A liver abscess is an inflammatory space-occupying lesion of the liver which is caused by numerous infectious agents. Bacterial and amoebic are the two most common infectious agents causing liver abscesses. Of these two, amoebic liver abscesses account for 60% of the cases [1]. Amoebic liver abscess present with a preceding history of diarrhea or dysentery with abdominal pain, fever, malaise. It can also present with jaundice if the abscess is large and is compressing the biliary radicles. It is diagnosed clinically, radiologically, and on microbiological investigations of the abscess fluid if it is aspirated. Metronidazole is the drug of choice and oral luminal amoebicidal drugs such as diloxanide furoate tackle intestinal amoebiasis. Ultrasound-guided percutaneous aspiration or catheter drainage is used for large abscesses with a thin rim of parenchyma around or left lobe abscesses. Surgical drainage is rarely needed these days. Amoebic liver abscess is associated with various local and systemic complications [2]. Rupture is amongst the most common complications of liver abscess. Rupture of the abscess may lead to generalized peritonitis or a localized collection in the abdomen. We present one such case of ruptured amoebic liver abscess causing localized and organized collection.

Case Presentation

A 50-year-old gentleman, an Electrician by occupation presented to the emergency with 15 days history of jaundice and 7 days history of fullness in the upper abdomen. The patient has no preceding history of diarrhea or dysentery associated with abdominal pain. There is no history of fever in the recent past. The patient is a chronic alcoholic for 15 years with no other significant medical or surgical history. On examination, the patient was icteric and had tachycardia. On inspection, epigastric fullness was noted. On palpation, a 10*10 cm lump was palpated in the epigastric region which was tender and tenderness was noted in the right hypochondriac region as well. On the basis of history and clinical examination, a diagnosis of pseudocyst of the pancreas was made. Blood investigations showed raised White cell count of 23000/cmm. Liver function tests were also deranged with a total bilirubin of 2.1mg/dl and direct 1.2 mg/dl, albumin of 2.3 gm/dl, alanine aminotransferase of 73 U/L. The patient was started on broad-spectrum antibiotics. Ultrasound of the abdomen suggested it to be a liver abscess and a pseudocyst which created a diagnostic dilemma. A Contrast-Enhanced Computerised Tomography (CECT) scan was done to confirm the diagnosis which also showed two different pathologies. Upon further discussion with senior radiologists, it showed a 9.9*7.3*10.5 collection in segments V and VI of the liver in a subcapsular location with an approximate 1.2 cm defect on its inferomedial aspect with an extension of collection through the foramen of Winslow into the lesser sac forming a thin-walled

collection measuring 9*16*17.3 cm (Figure 1).



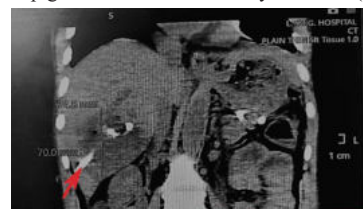
Figure 1: CECT showing ruptured liver abscess with collection in lesser sac with a thin rim of communication between the two through foramen of Winslow

Thus, a diagnosis of the ruptured liver abscess was established. The patient was shifted to Intravenous Metronidazole. Liver abscess was pigtailed under radiological guidance which drained anchovy sauce colored fluid (Figure 2).



Figure 2: Anchovy sauce colored pigtailed liver abscess fluid

and the collection in lesser sac was aspirated which drained fluid of same color and consistency further confirming the diagnosis that both collections are from same source. The lesser sac collection was not pigtailed as the pigtail in liver abscess cavity drained it (Figure 3).



Post pig tailing a total of 1.5 L of fluid was drained and patient improved symptomatically with decrease in the epigastric fullness and also blood investigations showed decreasing trend of White cell count and bilirubin. Post procedure patient developed bile leak from pigtail site which was managed conservatively.

Discussion

Amoebiasis is still a prevalent problem in developing countries due to poor sanitation. Extra-intestinal amoebiasis accounts for the major portion of morbidity and mortality associated with the disease. Amoebic liver abscess is the most common extraintestinal manifestation of the disease seen in 3% to 9% of total cases [3].

Usually liver abscesses present with fever, pain in the right hypochondrium, and anorexia. Jaundice can be seen in about 15% of patients with Amoebic liver abscesses and is usually associated with large and/or multiple abscesses and compression of the biliary tree by the abscess near porta hepatis or caused by concomitant alcoholic hepatitis [1]. But the patient in our case neither gave a history of fever nor hypochondriac pain hence liver abscess was not suspected. Furthermore, pseudocyst of the pancreas presents with a lump in the epigastrium, and with the patient's background of chronic alcoholism, pseudocyst seemed to be a correct clinical diagnosis.

The pseudocyst of the pancreas is a localized fluid collection that is rich in amylase and other pancreatic enzymes and is surrounded by a wall of fibrous tissue that is not lined by epithelium [4]. They are caused by pancreatic ductal disruption following increased pancreatic ductal pressure, either due to stenosis, calculi or protein plugs obstructing the main pancreatic ductal system, or as a result of pancreatic necrosis following an attack of acute pancreatitis [5,6]. It presents as a fluid filled, thick walled, rounded mass adjacent to the pancreas in an abdominal CT scan which was similar to what was seen in our patient's scan.

Complications of amoebic liver abscess are well known and consists of local complications such as pleural effusion, rupture, compression of biliary tree causing jaundice or of Inferior Vena Cava causing ascites and pedal edema, vascular thrombosis, and systemic complications such as Systemic inflammatory response syndrome, acute kidney injury, acute respiratory distress syndrome, shock, encephalopathy [2]. Risk factors for rupture include left liver lobe abscesses and abscesses with a thin rim (<10mm) of liver parenchyma [1]

Various cases of amoebic liver abscesses with complications of rupture have been reported such as rupture in the pericardium causing cardiac tamponade and requiring pericardial window [7], ruptured amoebic liver abscess with fulminant amoebic colitis [8], rupture into pleura causing acute respiratory distress [9].

Conclusions

This case report highlights the fact that Amoebic Liver Abscess can present in so many ways and truly the abdomen and its organs continue to be a Pandora's box.

With high quality imaging which reduces the chances of mismanagement by giving accurate diagnosis, one needs to be very cautious as regarding the diagnosis.

We wanted to highlight through this case report, a rare presentation of Amoebic Liver Abscess to be kept in mind in similar situations.

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