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Case report

Hepatogastric Fistula – A Grave Complication of Liver Abscess

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Abstract

Introduction: Liver abscess may rupture into adjacent thoracic, pericardial, and peritoneal cavities however fistulization into gastrointestinal tract is extremely rare; only a few cases of hepatogastric fistula have been reported. A majority of abscesses respond to medical management with complete resolution. Rupture into the thoracic or peritoneal cavity is a common complication of ALA. There are no established guidelines for diagnosis and management of this complication.

Case: A 36 years old patient, chronic alcoholic presented with lump and pain in epigastric region for 8 days. Pain was localized in epigastric region with intermittent episodes of high-grade fever. On general examination- febrile (100 F), Pulse rate -120/min, bp-100/60mmhg, spo2-98% on room air. On per abdomen examination- ill-defined lump seen over epigastric region. On palpation there was localized tenderness and guarding in epigastric region, liver was palpable 4cm below right costal margin in midclavicular line. USG (A+P) s/o 2 abscesses in left lobe of liver of volume 557cc(tappable) and 275cc(non-tappable) with suspicious breach into peritoneal cavity. Abscess was drained by USG guided pigtail catheter insertion- 600cc pus drained.

Discussion: Gastroduodenoscopy and CECT(A+P) are investigations of choice. Direct communication between abscess and gastric lumen can be demonstrated and presence of air along with oral contrast in abscess is confirmatory. Management includes broad spectrum antibiotics, drainage of abscess. Surgical management includes en bloc removal of involved portions of stomach and liver., endoscopic retrograde papillotomy with stenting of common bile duct.

Conclusion: Hepatogastric fistula because of pyogenic liver abscess is a rare complication still we need to have high degree of suspicion to diagnose it in early stage. Management can either be surgical, endoscopic or conservative, we have managed this patient conservatively.

Keywords: Hepatogastric, Fistula, Liver Abscess, Malena, Guarding.

Introduction

Liver abscess may rupture into adjacent thoracic, pericardial, and peritoneal cavities however fistulization into gastrointestinal tract is extremely rare; only a few cases of hepatogastric fistula have been reported. [1],[2]

Other causes of hepatogastric fistula include hepatocellular carcinoma invading into stomach, post embolization, percutaneous radiofrequency thermal ablation, amoebic liver abscess. [3],[4]

A majority of abscesses respond to medical management with complete resolution.[5] Large abscesses especially in the left lobe of the liver may require aspiration or drainage due to fear of rupture into the pericardium or the pleura. Rupture into the thoracic or peritoneal cavity is a common complication of ALA which is seen in about 22% cases of liver abscess.[6]

There are no established guidelines for diagnosis and management of this complication, although surgical management is a definitive treatment, conservative management has shown clinical improvements in several reports, as scenario in this case.

Case Scenario: A 36 years old patient, chronic alcoholic presented with lump and pain in epigastric region for 8 days. Pain was localized in epigastric region with intermittent episodes of high-grade fever. No history of vomiting, haematemesis, malena, jaundice, distension of abdomen, abdominal trauma, altered bowel habits. On general examination- febrile (100 F), Pulse rate -120/min, bp-100/60mmhg, spo2-98% on room air.

On per abdomen examination- ill-defined lump seen over epigastric region. On palpation there was localized tenderness and guarding in epigastric region, liver was palpable 4cm below right costal margin in midclavicular line.

Blood investigations- hb-10.3 TLC - 30,000, platelet -2.12 lacks, bilirubin-1.2, amylase- 40, lipase-30 IU, SGOT- 12, SGPT- 20.

USG (A+P) s/o 2 abscesses in left lobe of liver of volume 557cc(tappable) and 275cc(non-tappable) with suspicious breach into peritoneal cavity. Abscess was drained by USG guided pigtail catheter insertion- 600cc pus drained. CECT(A+P+chest)- s/o liver abscess with suspicious communication with greater curvature of stomach through a rent of approximately 1.5cm in length s/o hepatogastric fistula, mild pericardial effusion, bilateral mild pleural effusion. Food taken by patient would be seen in pigtail catheter via hepatogastric fistula. Patient was kept NBM, iv fluids given, observed and managed conservatively by broad spectrum antibiotics.

Follow up USG (15 days) showed minimal collection and food contents in catheter also reduced gradually and patient was discharge and followed up on OPD basis and there was spontaneous closure of fistula.

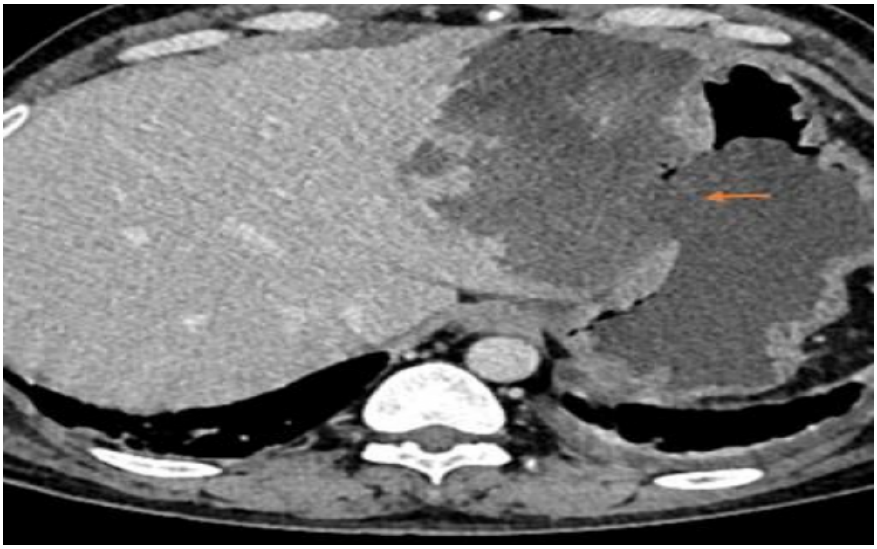

Figure 1: CT scan image showing liver abscess with hepatogastric fistula

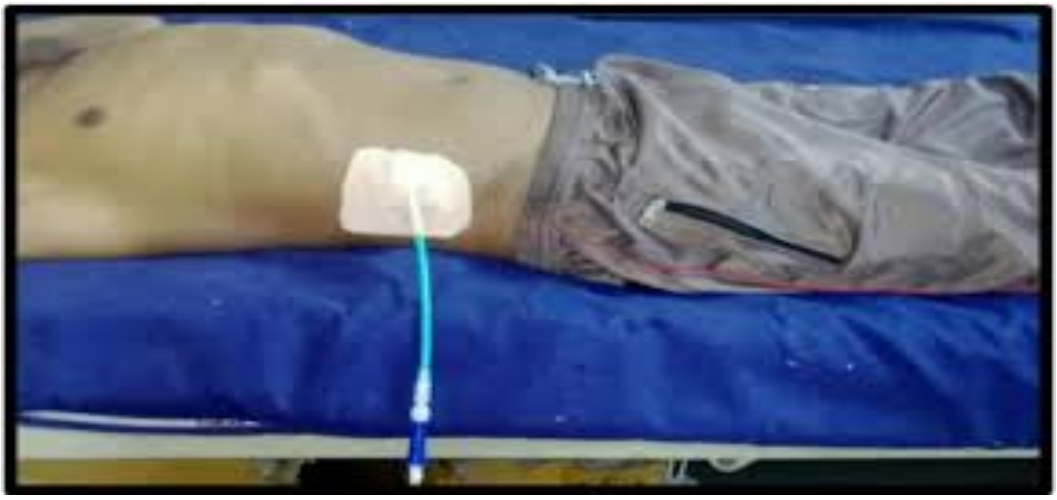

Figure 2: Pigtail insertion for draining liver abscess, gastric content seen in pigtail confirming the diagnosis

Discussion

Liver abscess may rupture into pleural cavity, pericardial cavity but fistulization into gastrointestinal tract is rare. [7]

Fistula might present with malena, bilious vomiting, drainage of food particles from catheter, sudden decrease in size of hepatic lesions, Ryle's tube aspirate containing pus, presence of gastric contents in aspirated material from abscess may indicate hepatogastric fistula. [8] Gastroduodenoscopy and CECT(A+P) are investigations of choice. Direct communication between abscess and gastric lumen can be demonstrated and presence of air along with oral contrast in abscess is confirmatory. This is similar to study by Tomiyama Y (2007). [9] Conservative management includes broad spectrum antibiotics, drainage of abscess. Surgical management includes en bloc removal of involved portions of stomach and liver., endoscopic retrograde papillotomy with stenting of common bile duct. Similarly, findings were noted by Praveen Wali et al (2017). [10]

Conclusion:

Hepatogastric fistula because of pyogenic liver abscess is a rare complication with only a few cases been reported. We need to have high degree of suspicion to diagnose it in early stage. Management can either be surgical, endoscopic or conservative, we have managed this patient conservatively. To avoid spontaneous rupture of abscess into gastrointestinal tract early drainage should be considered.

References

1. Wali P, Gopalan S. Sporadic hepatogastric fistula- a rare complication of liver abscess. EURORAD/CASE.14492; 2/18/6/2017.
2. Kim ES, Lee SY, Yeom JO, Cho YS. Education and Imaging. Hepatobiliary and pancreatic: Liver abscess complicated by a hepatogastric fistula. J Gastroenterol Hepatol 2013; 28:206.
3. De Lima E, Mayoral LG, Falabella F. Gastric perforation of amoebic liver abscess: report of a case. Transactions of the Royal Society of Tropical Medicine and Hygiene. Jan-Feb;83(1):79-80.
4. Pawar SV, Zanwar VG, Gambhire PA, Mohite AR, Choksey AS, Rathi PM, et al. Unusual complication of amebic liver abscess: Hepatogastric fistula. World J Gastrointest Endosc. 2015 July 25; 7(9): 916-919.
5. Sharma MP, Ahuja V. Amoebic liver abscess, JIACM 2003;4(2):107–111.
6. Sharma MP, Acharya SK, Verma N, et al. Clinical profile of multiple amoebic

liver abscesses. J Assoc Physicians India 1990;38(11): 837–839.
7. Monge-Fresse AS, Siriez JY, Bricaire F. Spontaneous fistulisation of a liver abscess into the stomach. Neth J Med. 2007; 65:456-457.
8. Gandham VS, Pottakkat B, Panicker LC, Hari RV. Hepatogastric fistula: a rare complication of pyogenic liver abscess. BMJ Case Rep. 2014 Jul 17;2014: bcr2014204175.
9. Tomiyama Y, Ohmoto K, Yoshioka N, Kawase T, Shibata N, Yoshida K, et al. [Pyogenic liver abscess complicated by gastric fistula and bacterial meningitis]. Nihon Shokakibyo Gakkai Zasshi. 2007; 104:1512-1518.
10. Chakdoufi S., Mamoune E. M., Brahim, E. M., & Anas G. A. Postoperative (Pressure) Alopecia on Head Rest Fixation Pointes Area, Following Intracranial Removal of Meningioma. A Rare but Disturbing Complication to Consider. Journal of Medical Research and Health Sciences, 2023; 6(3): 2480–2083.