Amoebic liver abscess: Role for intervention?

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ABSTRACT
Liver abscess complicates intestinal amoebiasis in 3–10% of the cases. Presented here is an interesting case of amoebic liver abscess which was diagnosed using ultrasound abdomen and CT scan showing compression of the right kidney. The patient was not responding to maximal medical management with intravenous Ceftriaxone and Metronidazole, underwent therapeutic and diagnostic aspiration of “anchovy sauce pus” and had relief of his symptoms of fever and abdominal pain after 6 days of admission. With this case we would like to highlight the use of therapeutic radiological intervention for the treatment of liver abscess and also discuss the indications, complications and role for the same in clinical practice.

Keywords: amoebic, liver, abscess

INTRODUCTION
Liver abscess is a complication of intestinal amoebiasis in about 3–10% of the cases. The cystic form of Entamoeba histolytica gain entry into the host by oral intake of food or water which is contaminated. After digestion of the cyst, the trophozoites are released into the gastrointestinal tract, where they may reach the liver via the portal system by entering the mesenteric venules. The trophozoites cause cellular necrosis with the development of abscess in the liver. In most of the cases the amoebic liver abscesses is usually solitary and surrounded by a thin walled granulation tissue1.

CASE DESCRIPTION
A 49 year old alcoholic male was admitted with fever, right hypochondriac pain of five days duration. On examination his vitals were stable and he was febrile and had right hypochondriac tenderness. Ultrasound abdomen showed liver abscess 7.3×5.9×7 cm with central liquefaction in the right lobe and this was confirmed with a contrast CT of the abdomen which in addition showed this liver abscess compressing the right kidney causing bulging of the capsule (Figures 1 and 2).

Figure 1: Axial CT Scan image of CT ABDOMEN (arterial phase) shows well defined hypo dense lesion in right lobe with peripheral wall enhancement and surrounding edema, with mass effect over right kidney
that there was no significant difference between Metronidazole only treatment and combining with aspiration. For patients not responding to medical therapy, surgical drainage has been considered. The most important of the indications for drainage procedures are large size abscess having compression sign or jaundice, persisting fever with chills, pain and high chances of rupture. It has been shown in studies that the liver tenderness significantly reduces after such drainage procedures or aspiration.

Surgical open drainage (laparotomy) is considered only for those with complicated amoebic abscess, e.g. secondary infection or peritonitis with perforation. However it’s noted that the mortality increases significantly with laparotomy.

CONCLUSION
This case study highlights the benefits of ultrasound guided aspiration even in smaller amoebic liver abscess in size (<10cm/<1000ml), with respect to relieving the patients’ symptoms and in addition being beneficial in clinical diagnosis through the analysis of the aspirated pus.

REFERENCES
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DISCUSSION
It was an earlier dictum that “any pus has to be drained” and hence all liver abscesses were drained, irrespective of their nature. But now, as there is more understanding on the etiopathogenesis of amoebic liver abscess and also since it is not regarded as a true abscess, majority of amoebic abscess are treated conservatively (medical management only). In uncomplicated amoebic abscess up to the size of 10 cm (1000ml), studies showed...