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A rare case of amoebic liver abscess with caecal perforation

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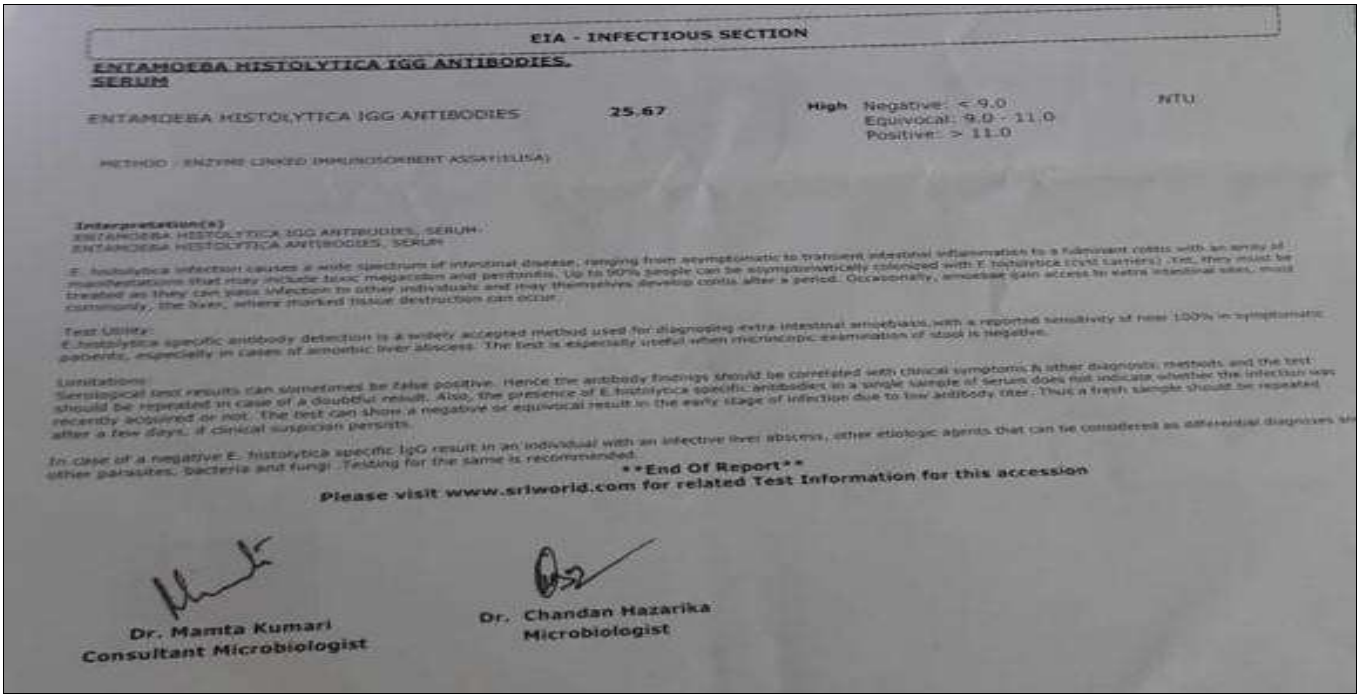
Abstract
Amoebic colitis is one of common infection in all groups of people in almost all geographical areas. Routinely it is easily treatable disease, but it can get complicated and then prognosis is poor. Amoebic liver abscess is a common complication of amoebiasis but along with caecal perforation it carries worst prognosis.

Keywords: Amoebic, liver, abscess, caecal, Amoebiasis

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 [1, 2]. 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 [3]. Bowel perforation from amoebiasis is very rare [4], and to have both simultaneously is very rare.

Case report
A 31 years old male was brought to the hospital emergency department in with complaint of pain abdomen, which started insidiously 7 days back and now progressed to diffuse abdominal pain. There is history of vomiting 2-3episodes/day for past 3 days which is non-bilious and non-projectile. No history of fever, loose stool, blood in stool or any other medical comorbidity.
On examination-he was conscious but drowsy, responding to verbal command, his 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.
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 plural effusion.
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, he was shifted for emergency laparotomy after Pre anesthetic check-up. 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 and ileo-transverse anastomosis was done. After thorough wash 2 drains placed and abdomen closure done. Specimen sent for histo-pathological examination which revealed amoebic abscess on colonic wall and serology is positive for Entamoeba Histolytica. Post op period he was kept in ICU where he was monitored and appropriate treatment given as discussed with multidisciplinary team. Patient Morrison drain was draining billous fluid from POD 2 and drain output was 20cc initially and it keep on decreasing and drain output was nil on POD 15 after which USG for collection was done and there was no collection in USG and drains were removed on POD-17. Patient developed wound sepsis on POD-4 and wound managed with daily dressing and secondary suturing done on POD- 10. Patient improved and discharged on POD-18.



EIA - INFECTIOUS SECTION

ENTAMOEBA HISTOLYTICA IGG ANTIBODIES, SERUM

ENTAMOEBA HISTOLYTICA IGG ANTIBODIES	25.67	High	Negative: < 9.0 Equivocal: 9.0 - 11.0 Positive: > 11.0	NTU

METHOD : ENZYME LINKED IMMUNOSORBENT ASSAY(ELISA)

Interpretation(s)
ENTAMOEBA HISTOLYTICA IGG ANTIBODIES, SERUM:
ENTAMOEBA HISTOLYTICA ANTIBODIES, SERUM

E. histolytica infection causes a wide spectrum of intestinal disease, ranging from asymptomatic to transient intestinal inflammation to a fulminant colitis with an array of manifestations that may include toxic megacolon and peritonitis. Up to 90% people can be asymptomatically colonized with E histolytica (cyst carriers). Yet, they must be treated as they can pass infection to other individuals and may themselves develop colitis after a period. Occasionally, amoebae gain access to extra intestinal sites, most commonly, the liver, where marked tissue destruction can occur.

Test Utility:
E.histolytica specific antibody detection is a widely accepted method used for diagnosing extra intestinal amoebiasis,with a reported sensitivity of near 100% in symptomatic patients, especially in cases of amoebic liver abscess. The test is especially useful when microscopic examination of stool is negative.

Limitations:
Serological test results can sometimes be false positive. Hence the antibody findings should be correlated with clinical symptoms & other diagnostic methods and the test should be repeated in case of a doubtful result. Also, the presence of E.histolytica specific antibodies in a single sample of serum does not indicate whether the infection was recently acquired or not. The test can show a negative or equivocal result in the early stage of infection due to low antibody titer. Thus a fresh sample should be repeated after a few days, if clinical suspicion persists.

In case of a negative E. histolytica specific IgG result in an individual with an infective liver abscess, other etiologic agents that can be considered as differential diagnoses for other parasites, bacteria and fungi . Testing for the same is recommended.

End Of Report

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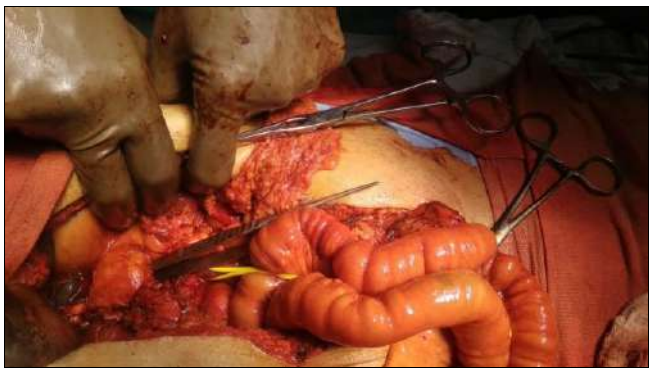

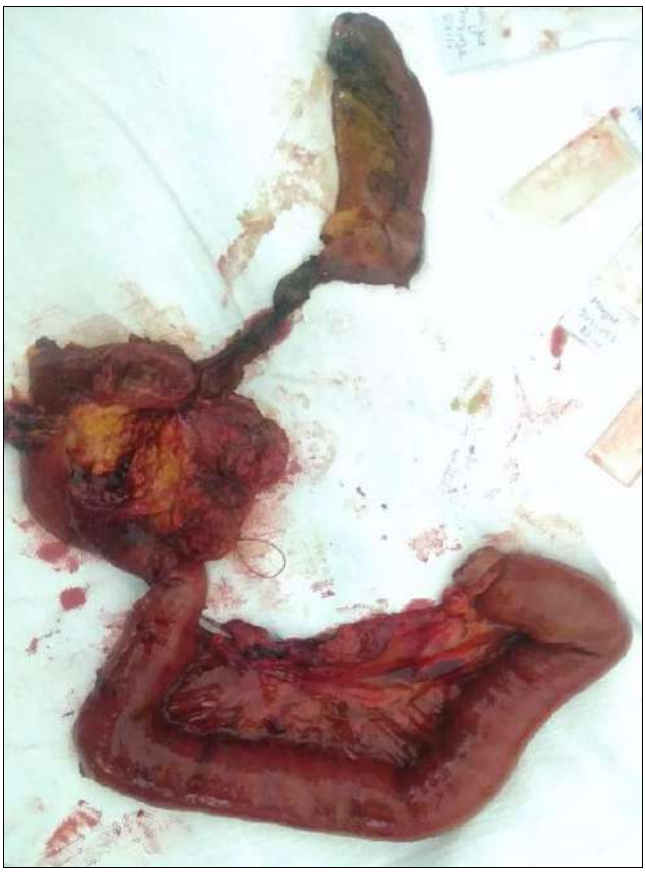

Discussion

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 [5].

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 [6, 7]. Eggleston *et al*. studied 26 cases of bowel perforation out of which 6 has un-ruptured liver abscess, all of them died after surgery [8].

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.

Conclusion

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

References

1. Stanley Jr SL. Amoebiasis. The lancet. 2003 Mar,

22;361(9362):1025-34.
2. Amoebiasis WH. Report on the WHO. Pan American Health Organization/UNESCO Expert Consultation Mexico City Geneva-WHO. Wkly Epidemiol Rec. 1997;72:97-100.
3. Majeed SK, Ghazanfar A, Ashraf J. Caecal amoeboma simulating malignant neoplasia, ileocaecal tuberculosis and Crohn's disease. Journal of the College of Physicians and Surgeons--Pakistan: JCPSP. 2003 Feb;13(2):116-7.
4. Oschner A. Hepatic amoebiasis-A 20-year experience and analysis of 263 cases. Surg Gyn Obs (IAS). 1951;92:209-17.
5. Rives JD, Heibner WC, Powell JL. The Surgical Complications of Amebiasis of the Colon: (Exclusive of Liver Abscess). Surgical Clinics of North America. 1955 Oct 1;35(5):1421-6.
6. Manukaran MN, Ahmad HA, Abdullah IS. Amoebiasis with multiple colonic perforations and ruptured liver abscess: A case report. Medical Journal of Malaysia. 1983 Mar, 1;38(3):71-3.
7. Prajapati DK, Rampal K, Prajapati JM. A Rare Case of Caecal Perforation with Ruptured Amoebic Liver Abscess. Annals of International Medical and Dental Research, 2(4), 6.
8. Eggleston FC, Verghese M, Handa AK. Amoebic perforation of the bowel: experiences with, 26.