# An Atypical Case of Amoebiasis Presenting with Constipation, Hepatic Abscess and Pleuropulmonary Disease

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## BACKGROUND

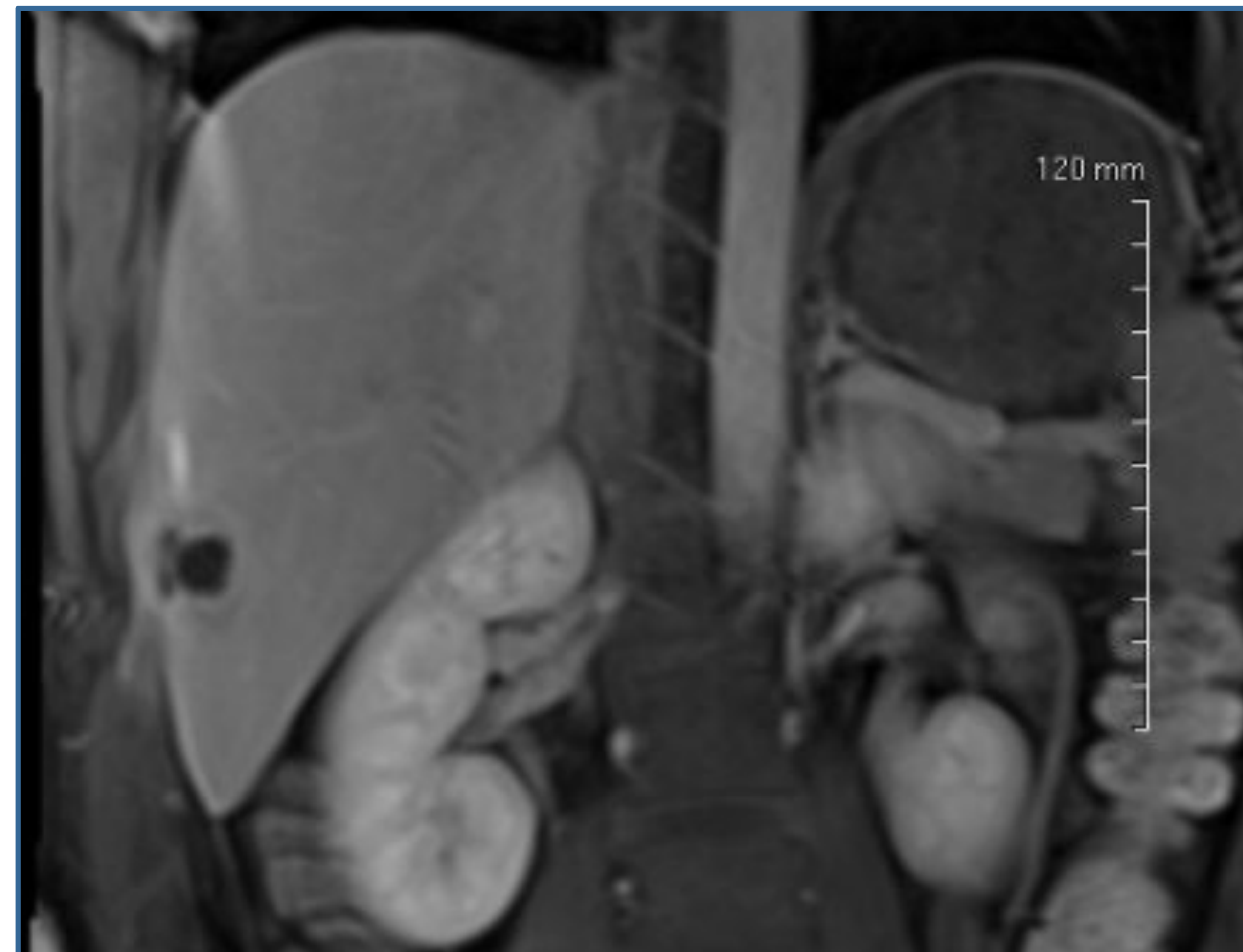
*Entamoeba histolytica* is an intestinal protozoan estimated to cause over 100,000 deaths annually. Amoebiasis is uncommon in developed countries, with cases limited to travel or migration from endemic areas. While exposure most commonly results in asymptomatic infection, dysentery and extraintestinal complications are well-described. Constipation however is an atypical manifestation of amoebiasis. We report an unusual case of amoebiasis, presenting with liver abscess and constipation with radiological evidence of pleuropulmonary involvement.

## METHODS

The medical record relating to the patient's admission and follow-up was reviewed. This was followed by a systematic review of the literature concerning amoebiasis and constipation.

## RESULTS

A 28-year-old man, previously well, presented with a two-week history of right upper quadrant (RUQ) pain and constipation. The pain was severe and pleuritic, with radiation to the right scapula. Constipation was profound, with the patient reporting 3 to 4 days between bowel motions. Notably, he had returned from a trip to India 7 months previously. Examination confirmed RUQ and right flank tenderness. Murphy's sign was negative. The patient was apyrexial and vitally stable at presentation. CT and MRI abdomen and pelvis revealed active colitis of the caecum, a 3.3cm fluid-filled hepatic lesion in segment 6 suggestive of abscess, and bibasal consolidative lung changes. Severe constipation created a diagnostic challenge as a faeces sample could not be sent for ova, cysts and parasites (OCP).




The patient was commenced on piperacillin/tazobactam and metronidazole to cover both amoebic and bacterial causes of liver abscess. A faeces sample, when acquired on day 5 of admission following multiple doses of laxatives, was negative for OCP by microscopy but positive for verotoxigenic *Escherichia coli* (VTEC) by polymerase chain reaction, suggesting a diagnosis of pyogenic abscess. Rapid clinical and biochemical improvement was achieved with empiric antimicrobial therapy. Ultrasound performed on day 11 of admission revealed a largely resolved liver lesion, yielding ~1mL of serosanguinous fluid on aspiration which was negative for bacterial 16S rDNA. Serology was subsequently strongly positive for *Entamoeba histolytica*, consistent with active amoebiasis. The patient was discharged on day 12 to complete a course of metronidazole and paromomycin, and reported no recurrence of symptoms when seen in clinic one week later.

## CONCLUSION

Constipation, a rare complaint in the setting of intestinal amoebiasis, coupled with the VTEC finding complicated the diagnosis in this patient. In summary, this case demonstrates an atypical presentation of amoebiasis, manifesting with constipation, liver abscess and asymptomatic pleuropulmonary involvement.

Figure - Coronal MRI image through the upper abdomen showing 3cm fluid-filled lesion within segment 6 of the liver.