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CASE REPORT

COLITIS OR CARCINOMA?? A CLINICAL DILEMMA A RARE CASE OF AMOEBIC COLITIS MASQUERADING AS CARCINOMA CAECUM

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ABSTRACT

Intestinal amoebiasis is caused by *Entamoeba histolytica* and is the second leading cause of death from parasitic infection worldwide¹. It is mostly asymptomatic but rarely, it can develop into amoebic colitis and ameboma formation closely resembling colorectal carcinoma. Here we present a case of a 65year old male presenting to the emergency ward with complaints of pain in abdomen for past 6 days and inability to pass stools for past 2 days. Provisionally it was diagnosed to be a case of Subacute Intestinal Obstruction (SAIO) and patient was operated in the emergency for the same. The caecum was resected and sent to histopathology lab of Department of Pathology, JNMC, AMU. Gross examination and CT scan findings were suggestive of Subacute Intestinal Obstruction with carcinoma caecum but histopathological findings were consistent with Amoebic colitis.

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INTRODUCTION

Amoebiasis is caused by protozoan *Entamoeba histolytica* which is distributed throughout the world. Amoebiasis kills 40,000-1,00,000 people annually and is the second leading cause of death from protozoan infection.¹ It is acquired by ingestion of contaminated food or water and is therefore endemic in developing countries with poor sanitation. Ten percent of the world's population becomes infected, 90% of which are asymptomatic.² *E. histolytica* is transmitted via ingestion of cysts found in faecally contaminated water, fertilizer, soil or the contaminated hands of food handlers.³ Occasionally, faecal-oral transmission can also occur. The cysts can remain viable in the environment for weeks to months. The cysts are digested in the intestinal lumen releasing trophozoites. The trophozoites reproduce by clonal expansion and subsequently form cysts which are excreted in the faeces to start a new cycle. Presentation can be variable ranging from asymptomatic infection, symptomatic non-invasive infection and acute proctocolitis to fulminant colitis with perforation. Amoebiasis may present as asymptomatic or mild to severe symptoms including abdominal pain, diarrhoea or bloody diarrhoea. Here we report a case of colonic amoebiasis in which the presenting symptoms, radiological findings and gross features resembled carcinoma caecum, with subacute intestinal obstruction.

History

A 65year old male patient presented to the emergency department of J.N. Medical College and Hospital with history of right lower quadrant abdominal pain for 6 days which was dull aching and non-radiating in nature along with inability to pass stools for past 2 days. No history of fever and diarrhoea. However, he had 2 episodes of vomiting which mainly consisted of clear fluids with undigested food particles. Patient was a chronic alcoholic and occasional smoker with no history of diabetes mellitus, hypertension or tuberculosis. No history of weight loss or bleeding per rectum was present. No family history of colorectal cancer and no travel history was given by the patient.

Examination: On physical examination, patient looked toxic with pulse rate of 126/min and mild pallor was noted. He had tachycardia with normal blood pressure. Per abdomen examination revealed abdominal distension, tenderness in right lower abdomen and mild hepatomegaly without any local rise in temperature. On auscultation, bowel sounds were found to be sluggish. On rectal examination, rectum was empty and examining finger was tinged with mucus.

Investigations: Blood tests revealed marked leucocytosis and mildly deranged liver function tests. Abdominal X-ray revealed dilated small bowel loops. CT scan: Gross irregular enhancing circumferential wall thickening of caecum with fat

stranding in surrounding adipose tissue and moderate luminal narrowing with dilatation of ileal loops with multiple air fluid level, suggestive of Subacute intestinal obstruction. Mild free fluid in pelvis- consistent with Carcinoma caecum or Gastrointestinal stromal tumour.

can affect any part of bowel but it has predilection for caecum and ascending colon.

Gross



Image 1. Intestinal segment labelled as caecum, terminal ileum and ascending colon was received. Total specimen measures 32cm*3cm *2cm. Outer surface is dull, congested and necrotic



Image 2. On cut section, inner mucosa is atrophic and ulcerated and a growth is identified at ileocecal junction measuring 7.5cm*6cm*6cm. On cut section the mass is soft, friable and necrotic

DISCUSSION

Annually, 40-50 million symptomatic cases are reported across the globe with 40,000-1,00,000 deaths each year.¹ Amoebiasis

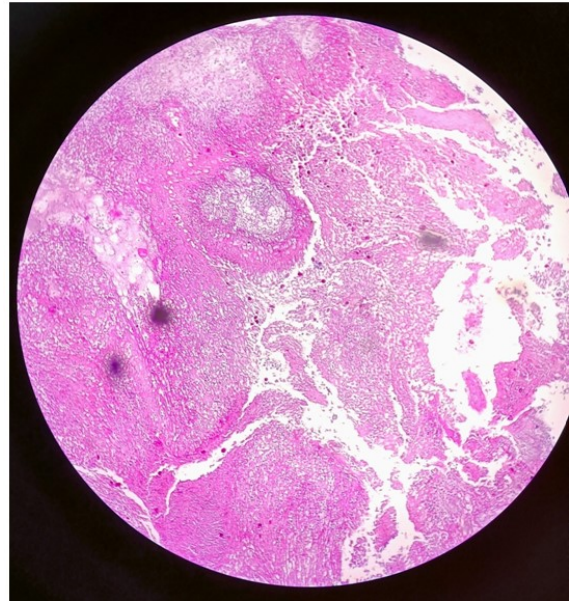


Image 3. H and E stained section shows partially ulcerated mucosa along with transmurally dense mixed inflammatory infiltrates predominantly neutrophils and dilated and congested blood vessels

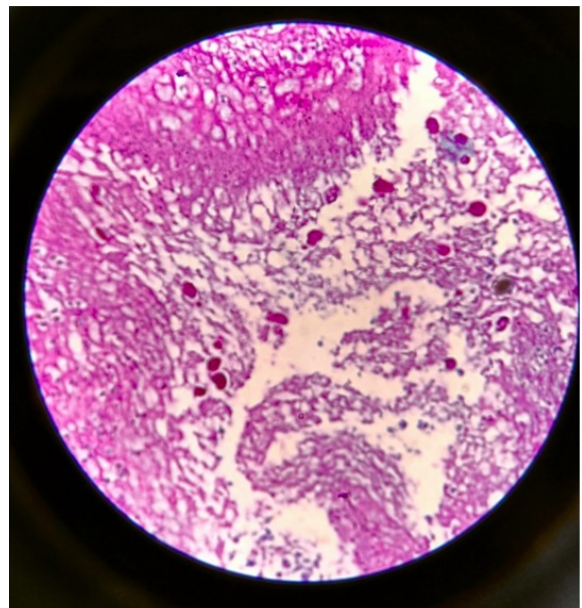


Image 4. H and E stained section shows abundant amorphous necrotic debris along with numerous trophozoites of *Entamoeba histolytica* which was further confirmed using PAS stain. No evidence of malignancy seen in the section examined

Rarely, amoebic colitis develops into tumorous, exophytic, cicatricial inflammatory masses known as Ameboma. Cases of amoebic colitis mimicking intraabdominal tumour or carcinoma colon had been reported before, but these patients either presented with chronic diarrhoea, abdominal pain, abdominal mass, or even with complications like perforation peritonitis. Herein, we describe a patient with amoebic colitis of caecum. The diagnosis of amebiasis in this case was challenging due to presentation of acute abdomen and intestinal obstruction instead of diarrhoea. Patient also didn't have any risk factors for amoebiasis such as poor sanitation or

immunocompromised state. *Entamoeba histolytica* is a major cause of diarrhoea in developing countries. The infestation starts with ingestion of the cyst of *Entamoeba histolytica* from faecally contaminated food or water. The cysts are digested in the intestinal lumen releasing trophozoites. An amoebic liver abscess resulting from hematogenous spread from the GIT is most common extraintestinal manifestation. In our case radiological-imaging suggested the possibility of carcinoma so, it was decided to proceed for surgical resection.

The conventional method for diagnosis of intestinal amoebiasis is examination of stool by microscopy. The reported sensitivity of this method in identifying amoebic protozoa ranges from 25-60% and is operator-dependent.⁴ Recent advances have introduced more sensitive and specific methods for diagnosis, which include antigen detection both in the patient's stool and serum.⁵ The principal treatment for amoebic colitis is with nitroimidazole therapy, metronidazole is the most commonly available drug.⁶ Surgery is rarely required and is indicated only in cases of diagnostic uncertainty. In the present case, the patient could have been spared surgery had a preoperative diagnosis of amoebiasis been made, but due to late manifestations of symptoms and slight ignorance he landed in the emergency with aggressive features of subacute intestinal obstruction. Amoebiasis is not uncommon in India and it should always be included as one of the differential diagnosis of acute abdomen and caecal mass. This is especially required when the patient gives a recent history of dysentery and travel to endemic areas. A high index of suspicion is crucial for diagnosis and is essential to avoid unnecessary surgery.

CONCLUSION

- Amoebiasis can present with complications like subacute intestinal obstruction and mimic carcinoma as well
- Amoebic colitis should be kept as a differential diagnosis in cases with a palpable abdominal mass and abdominal pain
- Trophozoites are best viewed on Periodic acid-Schiff stain.

REFERENCES

1. Stanley SL Jr. Amoebiasis. 2003. *Lancet* 361:1025-34.
2. Pelaez M., Villazon A., Sieres Zaraboso R. 1996. Amebic perforation of the colon. *Dis Colon Rectum* 9:356-62.
3. Simsek H., Elsurur R., Sokmensuer C., Balawan HY., Tatar G. 2004. Ameboma mimicking carcinoma of the caecum: case report. *Gastrointest Endosc.*, 59:453-4.
4. Moorchung N., Singh V., Srinivas V., Jaiswal SS., Singh G. 2014. Caecal amebic colitis mimicking obstructing right sided colonic carcinoma with liver metastases: A rare case. *J Can Res Ther.*, 10:440-2.
5. Haque R., Huston CD., Hughes M., Houpt E., Petri WA. Jr. 2003. *Moebiasis. N Engl J Med.*, 348:1565-73.
6. Powell SJ., Macleod I., Wilmot AL., Elsdon-Dew R. 1966. Metronidazole in amoebic dysentery and amoebic liver abscess. *Lancet.*, 2:1329-31.