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A Rare Case of Amebic Proctitis: Diagnostic Challenges and Clinical Insights

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Abstract: ***Methods: A 58years female who presented with complaints of altered bowel habits with occasional blood in stools for 1 month duration, patient didn't have history of fever, abdominal pain, tenesmus, weight loss or loss of appetite, no other constitutional symptoms. Patients was a known case of diabetes and hypertension. Clinical examination was unremarkable, digital rectal examination was normal. All the routine investigations were done were normal. Stool calprotectin was borderline elevated 54 iu/l, CECT abdomen showed symmetrical rectum thickening with peri rectal fat stranding. Patient was subjected for colonoscopy which showed features suggestive of solitary rectal ulcer syndrome and biopsy was taken which revealed nonspecific colitis. Patient was started with SR fill enema and dietary advice, patient responded to treatment initially and symptoms reappeared in the form of 3 - 4 loose stools with drops of blood in stools. Due to worsening symptoms and serial elevated calprotectin patient was started on mesalofoam enema along with oral mesalamine. Despite being treated with mesalamine patients were reoccurring, which led to clinical dilemma. Patient was subjected to repeat sigmoidoscopy and NBI targeted multiple biopsies were taken from rectosigmoid junction. Repeat biopsy HPE was confirmatory of amebic colitis and hence patient was started with oral metronidazole. Patient responded very well and became completely asymptomatic. Result: High clinical suspicion for amebic colitis even though the rectal involvement was quite uncommon and Repeat sigmoidoscopy with multiple targeted biopsies with histopathology examination proved amebic colitis. Patient had clinical response from day2 of initiating metronidazole. Conclusion: Rectal involvement in amebic colitis is rare. One should consider the possibility of amoebiasis in patient of left side colitis (proctitis) not responding to oral or rectal immunosuppressant rather than escalating the immunosuppressants for the patients from tropical countries.***

Keywords: Amebic colitis, rectal involvement, sigmoidoscopy, metronidazole treatment, SRUS (solitary rectal ulcer syndrome)

1. Introduction

Amebic colitis results from invasive infection of the colonic mucosa by Entamoeba histolytica (E. histolytica). Infection of *E. histolytica* parasite cysts occurs through the intake of food or water, which are contaminated by human feces because of poor environmental sanitation or personal hygiene. [7]. *E. histolytica* can spread by the ingestion of the amoeba cyst. The infective cysts can occur in contaminated food and water. Transmission by fecal - oral self - inoculation can also happen in oral - anal sexual contact. [3]. *E. histolytica*, the protozoan parasite causing amebiasis, colonizes the intestinal tract in 90% of susceptible individuals and presents asymptomatically. In 10%, the parasite overcomes the mucosal barrier of the colon and invades the lamina propria. [4]. Untreated invasive amebiasis can lead to severe colitis and fulminant infection, which is associated with high mortality. [5]. Areas with the highest rates of amoebic infection include India, Africa, Mexico, and some parts of Central and South America. In developed countries, therefore, amoebiasis is not common. Inflammatory bowel disease (IBD) is common in developed countries and an increasing incidence and prevalence of inflammatory bowel disease has been witnessed in developing countries. Because the clinical features of amoebic colitis resemble those of IBD, and therefore the risk of misdiagnosis is high [3, 4, 5, 6]. Amoebic colitis presents with abdominal pain and dysentery. Colonic manifestations comprise a spectrum of disease, including [1, 2]: acute proctocolitis (dysentery), perianal ulceration, fulminant colitis leading to colonic wall perforation, toxic megacolon, chronic (nondysenteric) colitis and ameboma.

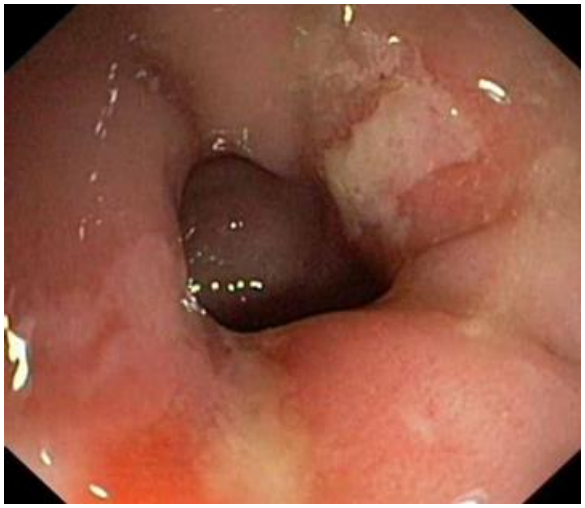
2. Case Report

A 58 year old female teacher by occupation hailing from chennai, presented to opd on 25/5/2022 with complaints of loose stools 3 - 4 episodes associated with drops of blood past 3 months. Patient did not have h/o fever, abdominal pain, or any other constitutional symptoms at the time of presentation. Patient is diabetic and hypertensive since 4 months. Patient was treated with antibiotics for the present complaints elsewhere On examination, patient was conscious, coherent, afebrile with normal vitals. Examination of the abdomen was normal, digital rectal examination was also normal with finger stained yellow stools. With rest of the systemic examination, routine investigations being normal patient was planned and posted for colonoscopy. Previous CECT Abdomen (29 - 4 - 22) was done which showed diffusely prominent mucosal fold in mid and lower rectum, enlarged perirectal nodes across short axis

Investigations (blood and stool) - Unremarkable except borderline elevated fecal calprotectin (63IU/L).

CECT ABDOMEN: Showed diffusely prominent mucosal fold in mid and lower rectum, enlarged perirectal nodes across short axis.

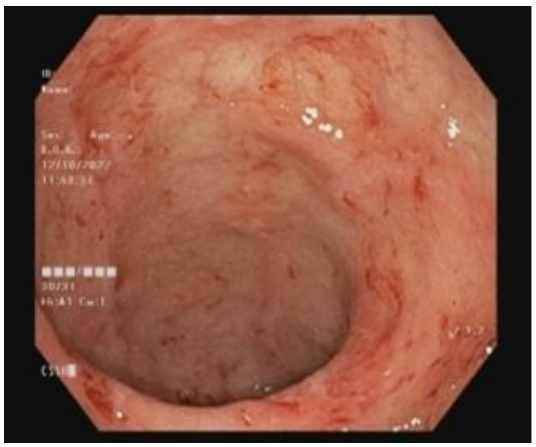
COLONOSCOPY (A): Multiple linear ulcer (2mm - 8mm) noted in the rectum with normal vascular pattern. Bx done - S/o SRUS.

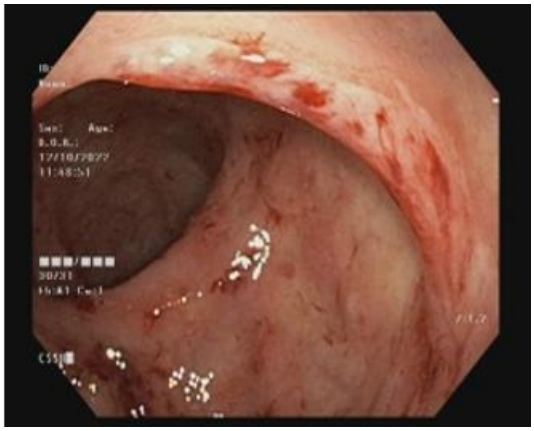


BIOPSY: Inflammatory infiltrate composed of lymphocytes, plasma cells, neutrophilic microabscess and eosinophils in lamina propria. Also cryptitis with mild cryptic hyperplasia and fibromuscular hyperplasia noted. Florid regenerative Atypia seen.

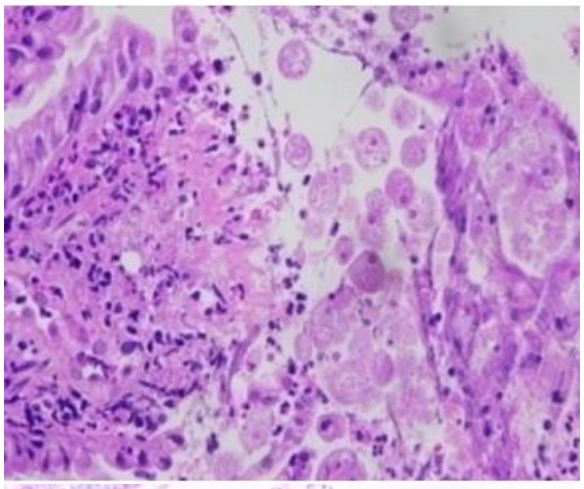
Follow Up: Patient was started on sucrafil enema and supportive treatment. Patient had significant relief and lost follow up for 2 months. After 2 months She presented with persistence of loose stools mixed with blood and no mucus, tenesmus present and no other constitutional symptoms. Repeat blood and stools investigations were unremarkable except stool routine showing Rbc + and few pus cells.

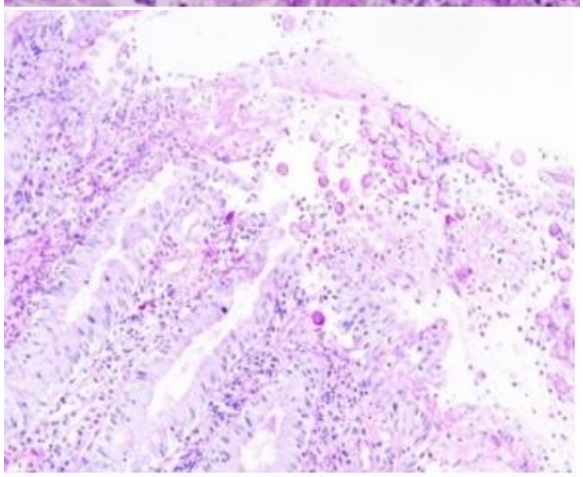
Sigmoidoscopy (Unprepared Bowel): multiple irregular superficial ulcerations noted in the rectum and distal sigmoid relatively preserved vascular pattern. Proctosigmoiditis –Bx done. (B1&B2)





Repeat BIOPSY (C1&C2): moderate to severe chronic active proctitis with fibrinopurulent exudation and Entamoeba histolytica (with ingested erythrocytes) seen.





3. Discussion

Isolated Rectal involvement in amebic colitis is rare. Fecal PCR has a sensitivity >70% and a specificity >90%.

Sensitivity of antigen detection in feces is 90%, and in serum is 65% in the acute setting. antibodies in serum is possible in 70–90% of individuals within 5–7 days of acute infection; however, this is not helpful in differentiating acute from previous infections.

Though Colonic biopsy specimens are gold standard but not considered a routine diagnostic tool, and visualization of amoeba is rare. The Patient was started on oral metronidazole which had drastic improvement in the symptoms from the second day of initiating medication. It was followed by luminal agents.

4. Conclusion

Amebic colitis is a close mimic for ulcerative colitis and Crohn's disease.

Inappropriate initiation of topical steroids or systemic steroids cause a flare - up in amebic colitis and the systemic dissemination.

Taking biopsies in colonoscopy without washing the ulcers is important for the better yield of amoeba in histopathological Examination. If feasible, a diagnostic scopy in unprepared colon has better sensitivity.

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