

# A rare location of ameboma: sigmoid colon

*Nadir bir ameboma yerleşimi: sigmoid kolon*

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## Abstract

A 52 year-old patient presented with cramping abdominal pain and was diagnosed as ameboma. We had some difficulties in leading to final diagnosis as ameboma can mimic both malignancy and inflammatory bowel disease. In this case report, we report an atypical form of ameboma located in the sigmoid colon in view of the current literature.

**Keywords:** Ameboma, abdominal pain

## Özet

52 yaşındaki hasta kliniğimize kramp tarzında karın ağrısı yakınması ile başvurdu ve ameboma tanısı aldı. Ameboma gerek inflamatuvar barsak hastalığı gerekse maligniteleri taklit edebildiğinden tanı sırasında güçlüklerle karşılaştık. Bu olgu sunumunda güncel literatür ışığında sigmoid kolon yerleşimli atipik formdaki bir ameboma olgusunu sunuyoruz.

**Anahtar kelimeler:** Ameboma, karın ağrısı

**Geliş tarihi/Received:** March 16, 2009; **Kabul tarihi/Accepted:** May 15, 2009

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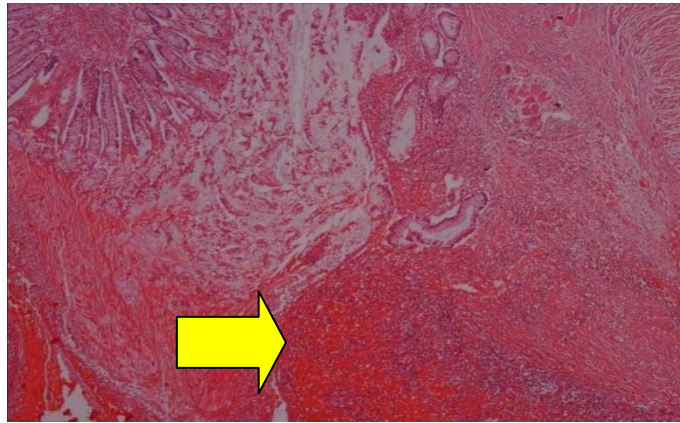
## Introduction

Amebiasis is an infectious disease caused by the protozoan *Entamoeba histolytica*. It is a worldwide disease; however developing countries have significantly higher prevalence rates because of poorer socioeconomic conditions and sanitation levels. Worldwide, approximately 40 to 50 million people develop colitis or extraintestinal disease annually with 40,000 deaths [1]. Ameboma is an uncommon manifestation of amebiasis, occurring in 1.5 percent of cases [2]. The ameboma or amebic granuloma is described as the proliferative fibrotic thickening that represents the response of the colonic tissue produced by the invading amoebae and the synergistic bacteria [3]. Amebomas result from the formation of annular colonic granulation tissue at single or multiple sites [1]. In decreasing order of frequency, lesions develop in the cecum, the appendix, and the recto sigmoid region [4].

A case of sigmoid colon located ameboma that caused a cramping abdominal pain but no diarrhea is presented in this case report.

## Case report

A 52 year-old male patient applied to our clinic for his cramping lower abdominal pain. He did not have fever, diarrhea or weight loss. Physical examination revealed mild tenderness in the lower quadrants of abdomen. Complete blood count showed mild leukocytosis. CT scan of the abdomen and pelvis was performed and there was thickening of the sigmoid colon on tomography. On colonoscopy, we observed a segment of about 20cms length in the sigmoid colon in which the scope could move with difficulty because of narrowing. In addition, there were hyperemic areas with a patchy pattern at that segment. Colonoscopic biopsy revealed chronic inflammation in lamina propria with mild loss of goblet cells. There was no granuloma or eosinophils at biopsy specimens. After exploratory laparotomy, 27cms of sigmoid colon that had thickened and rigid walls mimicking malignancy was resected. Histopathological specimens revealed inflammatory cell infiltrates and focal abscess formations beginning from submucosa extending to serosa and granuloma formation [Figures 1 and 2]. Stool antigen assay for *Entamoeba histolytica* was positive. The patient was treated with metronidazole for 15 days. One year after this operation, the patient is still well without any symptoms.

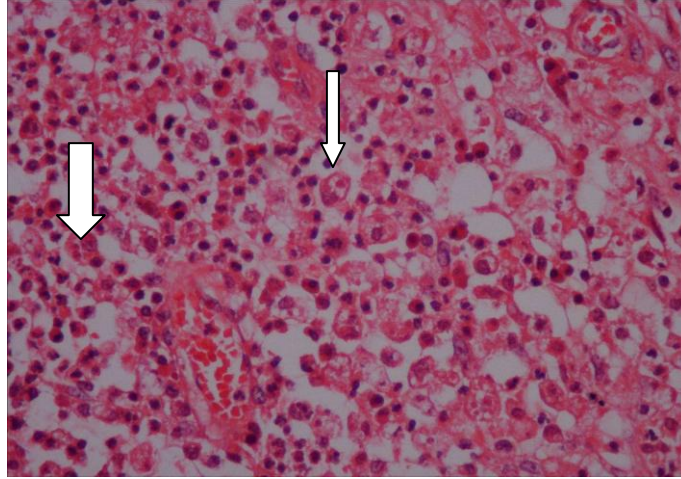


**Figure 1: Mucosal ulceration and granulomatous inflammation [HEX40].**

## Discussion

Amebiasis is especially common in tropical and subtropical regions worldwide. Its incidence in Turkey varies between 0.5-7.5% being most common in the south-eastern region [5]. Our patient was a businessperson having a clinical history of traveling to several regions of Turkey. Transmission of amebic colitis is mostly by ingestion of contaminated food or water, but venereal transmission via the fecal-oral route also occurs.

The parasite exists in two forms, a cyst stage that is the infective form, and a trophozoite stage. Trophozoites are responsible for invasive disease and may lead to colonic mucosal ulceration. Ameboma forms when severe inflammatory reaction occurs, possibly as a result of secondary bacterial infection. Amebomas usually develop in the untreated or inadequately treated patients with amebiasis years after the attack of dysentery [4]. Our patient did not report any history of dysentery. Clinically, patients may present with diarrhea or constipation and associated systemic symptoms, including weight loss and fever. In areas in which infection is prevalent, crampy abdominal pain plus a palpable mass usually suggests the diagnosis [1]. Our patient did not have any of these symptoms except the crampy abdominal pain.



**Figure 2: Mixed cellular inflammation and amebic trophozoites [HEX200].**

Unfortunately, there are no pathognomonic radiographic or endoscopic features specific for invasive ameboma formation; therefore, pathologic confirmation is very important, as well as appropriate serology. The pathological range of amebic colitis extends from mucosal thickening with discrete ulcer formation, separated by regions of normal colonic mucosa, to diffusely inflamed and edematous mucosa [6]. Pathological findings can mimic Crohn's disease and malignancy. Although the bowel wall thickness of our patient was increased suggestive of inflammatory bowel disease or malignancy, his endoscopic biopsy did not confirm neither Crohn's disease nor amebic colitis.

We diagnosed the patient by the positive stool antigen for *Entamoeba histolytica* and also amebic trophozoites were also positive in surgical specimens. As a result, a high index of suspicion is required for appropriate diagnosis. The current report is atypical because there is absence of the clinical picture of amebic colitis and the sigmoid colon is a rare location for ameboma.

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