

# Ameboma of the Ascending Colon

## Ameboma del Colon Ascendente

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### SUMMARY

*Ameboma is a rare complication of the amebic colon. It is a tumor-like mass of granulation tissue and the diagnosis rests upon the demonstration of E. histolytica in the section obtained by biopsy. Ameboma of the colon occurs rarely and can present as a mass lesion simulating colonic cancer. We report a case of a 61-year-old woman presenting with abdominal pain and vomiting. On clinical and radiological examination, the diagnosis was ascending colon carcinoma. After the colon resection, a histopathological section from the mass showed numerous E. histolytica in a background of fibrosis tissue and it was concluded to be an ameboma of the ascending colon.*

**Keywords:** Ameboma, colonic carcinoma-like lesion.

### RESUMEN

*El ameboma es una complicación rara del colon amebiano. Es una masa de tejido de granulación similar a un tumor y el diagnóstico se basa en la demostración de E. histolytica en la sección obtenida por biopsia. El ameboma del colon ocurre raramente y puede presentarse como una lesión masiva que simula un cáncer de colon. Presentamos el caso de una mujer de 61 años que consultó por dolor abdominal y vómitos. En el examen clínico y radiológico, el diagnóstico fue carcinoma de colon ascendente. Tras la resección de colon, un corte histopatológico de la masa mostró numerosas E. histolytica en un fondo de tejido fibroso y se concluyó que se trataba de un ameboma de colon ascendente.*

**Palabras clave:** Ameboma, lesión tipo carcinoma colónico.

### INTRODUCTION

Amebiasis occurs worldwide (1), but it is more prevalent in tropical and developing countries. Approximately 10 % of the world's population is infected with *Entamoeba histolytica* (2-5). Intestinal amebiasis has a broad spectrum of presentation ranging from asymptomatic to clinical disease manifested by dysentery and even extraintestinal disease such as liver or brain abscesses (6).

Ameboma is a rare presentation of invasive amebiasis, occurring in 1.5 % of cases with invasive amebiasis (2,5,7). It is a tumor-like

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mass of granulation tissue and the diagnosis rests upon the demonstration of trophozoite of *E. histolytica* in the section of tissue obtained by biopsy (8). The most common site of ameboma are the ascending colon and the cecum (5,9,10). This is difficult to differentiate from colonic carcinoma, especially in the elderly (2,3,5).

**CASE DESCRIPTION**

A 61-year-old woman presented with abdominal pain in the right lower abdomen and had vomited for 3 days. The patient was referred to the hospital with the diagnosis of acute appendicitis. On clinical and radiological examination, the diagnosis was ascending colon carcinoma. No biopsy had been done previously. She underwent opened laparotomy, and the ascending colon had a 16 cm length resected with a solid mass of diameter of 5 cm which was white yellow in the wall of the colon. The histopathological examination showed the mass composed of fibrous tissue, and fat, with an inflammatory cell of lymphocytes and plasma cells.

There were focuses on oval and round structures, nucleus central, vacuolated cytoplasm as Trophozoite *E. histolytica* (Figure 1) This slide was also shown to the Department of Parasitology Faculty of Medicine Sam Ratulangi University with the result being Trophozoite *E. histolytica* (Figure 2), so the diagnosis was ameboma.

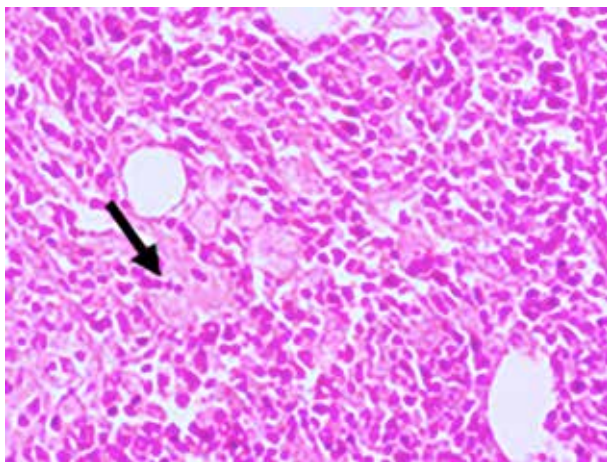


Figure 1. Fibrous tissue, inflammatory cells and *E. histolytica* (black arrow).

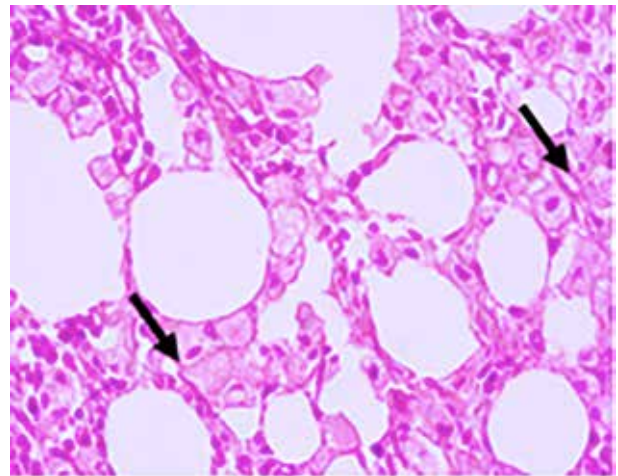


Figure 2. *E. histolytica* (black arrow) between fat tissue.

**DISCUSSION**

Ochsner and DeBakey formulated the term “ameboma” originally described as amebic granuloma by Gunn and Howard (2). They usually occur in untreated or inadequately treated patients with amebiasis. This can develop over months or many years after the original infection. Ameboma is usually single and involves a short segment of the colon. The lesions vary in size but may measure up to 15 cm in diameter (11). These are found in decreasing order of frequency in the cecum, the appendix, and rectosigmoid colon. It rarely involves the transverse colon, hepatic and splenic flexure (2,12,13).

Amebomas cause numerous symptoms including alternating diarrhea and constipation, weight loss, and low-grade fever. In endemic areas, cramping, lower abdominal pain, and a palpable mass suggest the diagnosis (10,11). Rarely, ameboma may be accompanied by amebic liver abscesses and may be misdiagnosed as metastatic carcinoma of the colon (13). The differential diagnosis includes Chron’s disease and appendiceal abscesses in younger individuals, and colon cancer and diverticulitis in the elderly.

This patient was referred to the hospital with the diagnosis of acute appendicitis, and after clinical and radiological examination the diagnosis was colon carcinoma. In this case, the

diagnosis of ameboma could not be suspected before the operation procedure because this patient was old age and ameboma tends to occur in younger patients. Histopathological examination of the intestinal biopsy specimen is essential to differentiate between ameboma and malignancy. Ameboma, though classically described as a mass of granulation tissue, can present with ulcerative lesions in the colon which reveal trophozoite of *E. histolytica* on biopsy examination. In general, trophozoites are round or oval having more vacuolated cytoplasm with round nuclei. On routine stain, trophozoites can be misdiagnosis as macrophages. Special staining is useful in these instances. Staining with PAS or immunoperoxidase and antilectin antibodies aids in the visualization of amoebae. Trophozoites appear bright pink on PAS staining. Heidenhain's iron hematoxylin stain demonstrates erythrophagocytosis (2,10,13).

Perforations are rare but a serious complication of colorectal cancer, with a mortality rate of 30 %-40 %. Ameboma usually has a favorable response to medical therapy, but in elderly patients receiving corticosteroids may have a severe effect and unfavorable outcome in terms of poor response to medical therapy, and rarely, it may perforate, leading to surgical resection (2).

### CONCLUSION

This presented case had an unusual presentation of this rare disease entity as a tumor of the colon. A definitive diagnosis from the clinical and radiological examination is difficult. Although the elderly population has a higher incidence of colonic malignancy, ameboma should be considered in the differential diagnosis of colonic tumors. The final diagnosis was made on histopathological examination.

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