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Case Report

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Benign Anal Stenosis After Anorectal Ameboma

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ABSTRACT

Rarely, a localized invasive amebic infection results in a mass of granulation tissue forming, known as ameboma. For this reason, The ameboma should be considereded in the differential diagnosis of the rectal disease suggesting anorectal carcinoma *©2007, Firat University, Medical Faculty*

Key words: *Anorectal Ameboma, Y-V Anoplasty, Bening Anal Stenosis, Anorectal Mass*

ÖZET

Anorektal ameboma sonrası bening anal stenoz

Lokalize olmuş amebik infeksiyon, nadir olarak, ameboma olarak bilinen ve granülasyon doku oluşturan bir kitleyle sonuçlanır. Bu nedenle ameboma anorectal karsinoma düşünülen rectal hastalıkların ayırıcı tanısında düşünülmelidir. *©2007, Fırat Üniversitesi, Tıp Fakültesi*

Anahtar kelimeler: *Anorektal Ameboma, Y-V Anoplasti, Bening Anal Stenozis, Anorektal Kitle*

Amebiasis which caused by *Entamoeba histolytica*, a pathogen or invasive parasite, produces the wide spectrum of intestinal infection ranges from asymptomatic to transient intestinal inflammation to a fulminant colitis with an array of manifestations that may include toxic megacolon, and peritonitis (1). However, the clinical feature of ameboma colon and / or rectum is rare. The ameboma is described as the proliferative fibrotic thickening that represents the response of the colonic tissue produced by the invading amoebae and the synergistic bacteria. The incidence of ameboma formation following amebiasis is about 1 to 2 percent sites of formation, which may involve the entire colon with a decreasing frequency of cecum 40%, transverse colon 9.5% and sigmoid colon 5.2%, rectum and anal canal 26.5% (2).

In ameboma there is a violent inflammatory secondary bacterial infection. An uncommon complication of amebic infection that is of interest to surgeons is the ameboma, a mass of inflammatory tissue that may cause colonic narrowing and being confused with carcinoma (2,3). Anal stenosis, sometimes called anal stricture, is the term applied to an abnormal tight, non-elastic anal opening. Treatment of this abnormality depends on its severity anal location within the anal canal. Most cases of mild and moderate anal stenosis are palliated by high fiber diet, bulk laxatives and gentle digital dilatation. Occasionally, lateral internal sphincterotomy may be required (4). Several procedures have been described to introduce healthy anoderm and skin into the anal canal, such as Y-V anoplasty, S-anoplasty, island flab anoplasty, C-plasty. We report a case with successful use of Y-V anoplasty to treat anal stenosis of the lower anal canal after seven year follow-up.

CASE REPORT

A 50-year-old woman was admitted to local military hospital with symptoms of weight loss (~7 kg), loss of appetite, rectal pain, and decreased stool caliber without any vomiting or diarrhea. and hematochezia after defecation seven years ago. Two weeks prior to admission, the patient had a suspicious biopsy result for carcinoma from another hospital.

On physical examination at admission, the oral temperature was 37.8ºC, the blood pressure 140/80 mmHg, and the pulse rate 88 per minute. Normal bowel sounds were noticed and there was no evidence of an abdominal mass, hepatomegaly or splenomegaly. The anal orifice was seen narrowed her anus inspection. The examination of anal canal was only possible by index finger. Anorectal examination showed that, however, revealed an almost circumferential, endured, annular mass on the lower rectum and anal canal. On pediatric sized sigmoidoscopic examination, this annular mass was found to be hyperemic, friable, ulceration, a foul odor, mucus production and narrowing of the lumen of anorectum was noted. After the patient had been sedatized with 3 mg midazolam IV, a surgical biopsy sample of mass was taken for histopatological examination. Histological biopsy was reported as acute and chronic inflammation, necrosis and ulceration (Figure 1). Numerous trophozoites of *E. histolytica* surrounded by halos were observed. The organism well– defined circular nuclei and many contained phagocytes red blood cell. The histopathological findings probably caused by amebiasis. There is no evidence of malignancy in histopathological examination. The stool screening studies for ova and parasites, particularly *E. histolytica* were negative. Laboratory data included the following: WBC 12,000/mm^3, platelets

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423,000/mm^3, hemoglobin 12 gr/L, hemotocrit of 45%, erythrocyte sedimentation rate 50/h. Blood chemistry showed as follows: AST, ALT, and total serum bilirubine levels normal (27 IU/L, 27 IU/L, 0.9 mg/L, respectively), increased alkaline phosphates 80/L (normal 10-40 IU/L). A barium enema study could not show anything throughout the colon except the mass in the rectum.

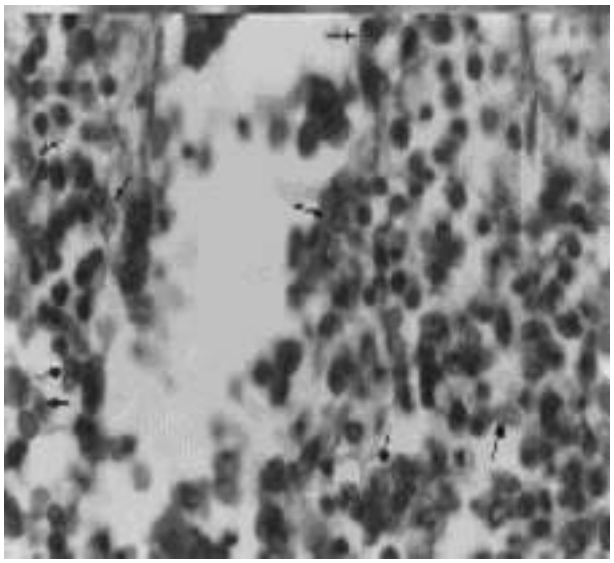

Figure 1. Photomicrography of rectal biopsy specimen, showing a cut and chronic inflammation and numerous trophozoites with phagotized red blood cells that were dyed with Hematoxyline and eosine (40x10).

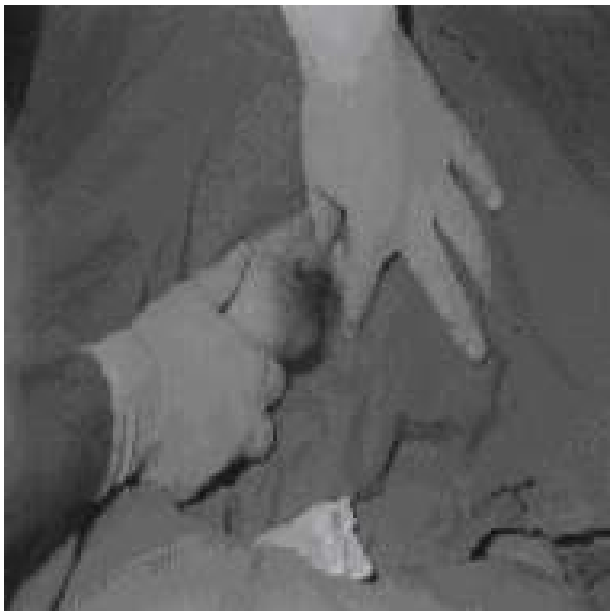

Figure 2. The appearance of Y-V anoplasty operation scar after five year.

Serologic test indirect hemagglutination (IHA) Assay (Behring, Marburg, Germany) was positive for E. histolytica at 1:512 titer. After evaluating above her signs and laboratory results, it was considered that the patient had a anorectal ameboma. The patient was treated with metronidazole 250-mg. three times in a day. After six weeks, there was still a benign anal stricture and her IHA test decrased (1/128), stool studies were negative for ova and parasites. On her abdominal and pelvic USG examination were normal at admission. Two week later, and the patient was admitted to hospital for a Y-V anoplasty operation. Y-V anoplasty operation was performed with the technique described by Nickell and Woodward (Figure 2). On 3, 6, 12, 24, 60 months follow up examinations; the patient had no complaints for anal stenosis. After the patient was free of complaints Y-V anoplasty operation was applied for anal stricture. No complications were observed during postoperative period.

DISCUSSION

Ameboma of the rectum is rare, accounting for only 1.5 percent of cases of invasive amebiasis (5). Invasive amebiasis is seldom a consideration in the differential diagnosis of gastrointestinal disease. Therefore, it may progress to one of its more unusual forms, such as ameboma. The diameters change from millimeters to few centimeters, and ameboma is found in decreasing order of frequency in the cecum, ascending colon, rectum and sigmoid colon, transverse colon and descending colon and can be detected on physical examination as a tender palpable mass (6). Clinically most cases are asymptomatic, with no history of a past acute amebiasis attack. Symptoms are varied out include alternating diarrhea and constipation weight loss, low grade fewer, cramp like abdominal pain, fatigue, loss of appetite and anemia. Especially and localization is with chronic anal pain and bleeding (2). The case that we reported was about 50 years old woman who had some complaints about weight loss, rectal hemorrhage, pain and not to feel relieved after defecation. The ameboma can be mistaken for a carcinoma on barium enema (7). Amebic strictures are most commonly observed in anus, rectum, or sigmoid colon and must be differentiated from those due to lymphogranuloma venerum or malignancy. On noninvasive radiological examinations, the amebomas tend to show and invasion of the colonic wall circumferentially and macroscopically have a polypoid appearance. The diagnostic evaluation is difficult to make only by rectosigmoidoscopical or colonoscopical studies. Doubled – contrast barium enema graph was performed and there was no synchronized mass throughout the colon except the pathology in the anal canal. Differential diagnosis could only be established by demonstrating the amebic trophozoites on biopsy specimen. We realized that trophozoites *of E. histolytica* as a result of the biopsy and the study of paraffin blocks cross-sections that had been taken from in another hospital. We thought that patient had ameboma because the IHA test also suppoorted serologically. This lesion can imitate all chronic intestinal granulomatous disease, diverticulitis and above all carcinoma (8). In all cases, which are suspicious about inflammatory intestinal disease, the study of rectal rubbish, rectal biopsy and indirect hemagglutination (IHA) tests must be done in order to eliminate amebiasis (9,10). Operation is necessary at the cases in while complications occur after medical treatment. In the resection, the surgery line should be far from 3-5 cm of ameboma mass. The operation, which is made before the initial antiamebic treatment, is not recommended because of the high complication rate (11). We also applied antiamebic treatment at the case harmonizing with literature; after six weeks was observed that the mass was recovered. Later on we performed Y-V anoplasty for anal stenosis because this technique is indeed simple and effective. Patient could be managed with out flap related complications after operation. There was no postoperative complication at 3, 6, 12, and 24th months, the patient who was called to the

hospital after five year for control had no complaints about defecation. The Y-V anoplasty for benign anal stenosis may be controversial and needs larger series. As a result, the physicians should be aware of that is very important to distinguish amebomas from the other colorectal and anal tumors and to define them before the operation because these lesions can be recovered with medical treatment and there should not to need no need for further operation.

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