

Cavernous Hemangioma Associated with Tuberculosis of the small intestine: A rare case report

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Abstract

A cavernous hemangioma of the colon is a very unusual benign vascular tumor. Below is a brief description of the patient's symptoms, diagnosis, and treatment plan for a cavernous hemangioma of the jejunum. A 45-year-old man who had experienced extensive abdominal pain and abdominal distension for 20 years reported a recent worsening of his symptoms. He denied experiencing smaller stools, changing his bowel movements, or losing weight. Laboratory testing led to the discovery of microcytic hypochromic anemia. The colonoscopy's findings supported the presence of a haemangioma. An abdominal computed tomography scan with contrast enhancement showed intestinal dilation, swelling of the mesenteric lymph nodes, intestinal focal and concentric thickening of 15 cm, and vascular dilatation. This discovery is associated with infectious granulomatous disorders such as lymphoma, intestinal TB, carcinoid tumors, and Crohn's disease. The piece of the patient's jejunum that contained the lesions was cut out during the exploratory laparotomy. A histological examination of the removed jejunum revealed a cavernous hemangioma associated with tuberculosis to be the small intestinal tumor responsible for the patient's severe anemia.

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Introduction

Embryonic mesodermal tissue, which is quickly expanding, gives rise to benign vascular tumors called hemangiomas. Endothelial cells, which can appear in a variety of forms, manifestations, and sizes, proliferate in them, identifying them. It could occur anywhere in the body (1).

The three types of hemangiomas-capillary, cavernous, and mixed are categorized according to their histological appearance. Cavernous hemangioma is the most common type. Hemangiomas are a factor in just 0.05% of instances of gastrointestinal neoplasms (1). With the gastrointestinal tract being affected less commonly, they primarily affect the skin, liver, and pancreas (2).

Benign vascular tumors include hemangiomas. The most typical symptom of small intestine hemangiomas is gastrointestinal bleeding. Occult bleeding from the gastrointestinal tract can be brought on by capillary hemangiomas, however, cavernous hemangiomas typically cause sudden hematemesis or melena, and occult bleeding from the gastrointestinal system is less common (3).

An investigation conducted in 2009 found that 7.7% of 1044 patients who experienced gastrointestinal bleeding also had intestinal hemangiomas. The ileum was affected by lesions in five patients, the jejunum by lesions in seven patients, and the jejunum and ileum by lesions in one patient (4).

In the report, we describe a case of a small intestinal cavernous hemangioma that caused occult gastrointestinal bleeding and review the documentation of this condition in the literature.

Case Report

A 45-year-old male was taken to the emergen-

cy room with diffuse stomach pain and abdominal distension. He denied experiencing changes to his bowel habits or the consistency or weight of his stool. The physical examination's findings weren't particularly outstanding. The sole variation found in the lab was microcytic hypochromic anemia. The patient's colonoscopy results were consistent with a haemangioma.

An abdominal computed tomography (CT) scan with contrast showed intestinal dilation, enlargement of the mesenteric lymph nodes, and vascular dilatation in addition to a localized and concentric thickening of the jejunum measuring 15 cm (Figure 1). This observation is consistent with granulomatous infectious disorders such as lymphoma, intestinal TB, carcinoid tumors, and Crohn's disease. The tuberculin skin test resulted in a substantial 25-mm reaction. Due to possible intestinal TB or expansive damage, the patient underwent an exploratory laparotomy with visualization and the removal of 40 cm of intestinal tissue. The anatomical-pathological investigation identified a small intestine cavernous hemangioma (Figure 1) which is characterized by the development of numerous blood vessels into significant cavernous vascular pathways with blood-filled sinus spaces.

The endothelium was composed of a single layer of flattened cells; it lacked atypia or mitotic activity as well as multiple caseating granulomas created by caseous necrosis. These granulomas were surrounded by clusters of epithelioid cells, and a few Langhans-type giant cells, and were separated by fibrofatty stroma (Figs. 2 and 3). The patient had surgery, recovered fully, and showed no signs of illness.

Discussion

From mesodermal tissue, hemangiomas are hamartomatous lesions that appear from birth(5,6). Abdominal pain and distention are

common gastrointestinal symptoms that might present with a wide range of differential diagnoses. The proper diagnosis is frequently made with the help of further testing. In this report, the first theory was that the symptoms of stomach pain and prior instances of intestinal blockage were indicative of inflammatory bowel illness, more specifically Crohn's disease.

Due to the high frequency of this infectious chronic disease in Bangladesh, intestinal TB is a crucial differential diagnosis. A patient's quality of life may be impacted by Crohn's disease, a chronic condition with a complex etiology that can lead to persistent intestinal damage and functional disability (1).

Common symptoms include weight loss, diarrhea, fever, and stomach pain, albeit the majority of these were absent in our current case. At the time of diagnosis, more than one-third of patients have disease complications such as stenoses, fistulas, or abscesses; around 50% of patients will eventually need surgery (1).

Complementing endoscopic examinations with radiologic tests like MRIs, computerized enterotomography, and transabdominal ultrasounds allows for the investigation of the presence of problems including stenoses and fistulas (5).

Surgery may be recommended in cases that are ambiguous but have complications, as in the current instance. When treating immunocompromised patients, patients who relocate to affected areas, and patients who live in endemic areas like our patients, intestinal tuberculosis is a crucial differential diagnosis to take into account. The most common symptoms include nausea, vomiting, diarrhea, anorexia, bloating, and abdominal pain (7).

Endoscopic features include common lesions

such as colonic ulcers, ileocecal valve involvement, and pseudopolyps. The most common differential diagnoses for Crohn's disease include perianal lesions, a parallelepiped pattern, and longitudinal or aphthous ulcers (8).

Expansive lesions like adenocarcinoma and gastrointestinal lymphomas are another differential diagnosis. The second duodenal section of the body is where adenocarcinoma typically develops, and its primary symptoms include bleeding, intestinal obstruction, obstructive jaundice, vomiting, and devouring syndrome (7).

Primary gastrointestinal lymphoma is an uncommon form of cancer that includes lymphomas that start in the digestive system. Abdominal discomfort (59.3%) was shown to be the primary symptom of gastrointestinal lymphoma in a systematic analysis, according to the authors. The primary site of the lymphoma is the ileocecum (37.2%), and the subtype of diffuse large B-cell lymphoma accounts for 53.6% of cases. The most common form of treatment prescribed (60.7%) is surgery and chemotherapy. Having a B-cell lymphoma and having it in the ileocecum were linked to better survival, whereas having an advanced stage and having B symptoms were linked to worse survival (8).

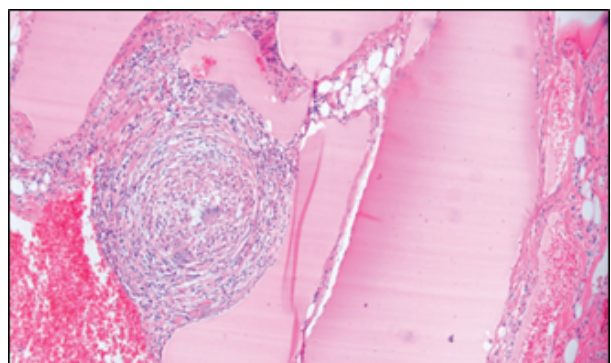


Figure 1: Haematoxylin-eosin 40x view

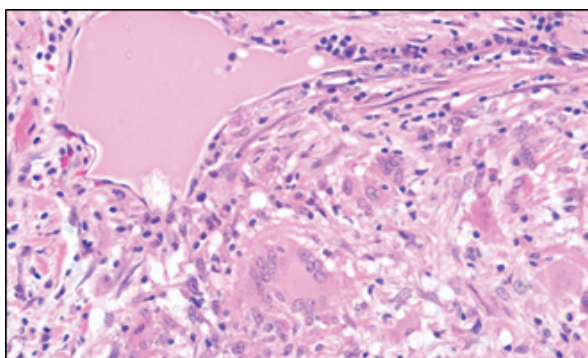


Figure 2: Haematoxylin-eosin 40x view (epithelioid cells)

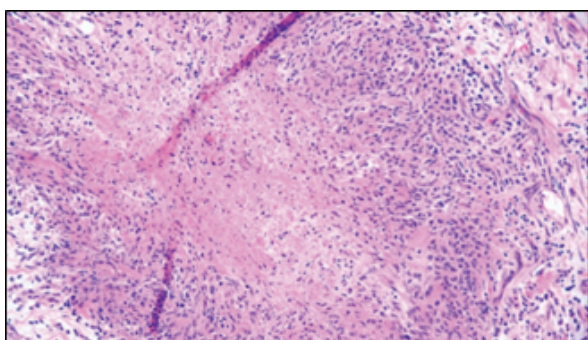


Figure 2: Haematoxylin-eosin 40x view (caseous necrosis)

Conclusion

Patients who experience frequent intestinal bleeding and bowel obstruction should be checked for gastrointestinal hemangiomas, a rare and occasionally misunderstood condition. There are numerous varieties of diagnostic equipment. The gold standard in diagnosis, video colonoscopy, needs X-rays, CT scans, or MRIs as a backup. Surgery is the most effective method. Despite being uncommon, intestinal haemangioma should be considered when developing a differential diagnosis for intestinal illnesses. By using intraoperative surveillance, surgeons can decide on the resection technique.

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