

Mesenteric Fibromatosis: Case Report

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ABSTRACT

Small bowel obstruction is a common surgical problem with many potential etiologies. A 24-year-old African-American male presented with bowel obstruction secondary to incarcerated inguinal hernia and mesenteric fibromatosis. The latter diagnosis was delayed. Surgical correction of both etiologies was required. Our case represents an interesting combination of one of the most common causes and certainly one of the least common causes of bowel obstruction occurring simultaneously. Overall, mesenteric fibromatosis is a rare condition with an incidence of about 2-4 patients per million. It is, however, the most common primary mesenteric tumor. This case represents a rare and potentially unique simultaneous occurrence of both the most common as well as one of the least common causes of bowel obstruction.

Key words: Mesenteric fibromatosis, Small bowel obstruction, Inguinal hernia

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ÖZET

Mezenterik Fibromatozis: Olgu Sunumu

İnce bağırsak obstrüksiyonu birçok potansiyel etyolojisi olan ve sık karşılaşılan cerrahi bir problemdir. Afro-Amerikalı 24 yaşında erkek hasta inkarsere inguinal herni ve mezenterik fibromatozise sekonder bağırsak obstrüksiyonuyla başvurdu. Mezenterik fibromatozis tanısı gecikti. Her iki etyolojinin de cerrahi olarak doğrulanması gerekti. Bu olguda bağırsak obstrüksiyonunun en sık görülen sebebi ile kesinlikle en az sıklıkta görülen sebebi ilginç bir şekilde eş zamanlı olarak mevcuttu. Mezenterik fibromatozis milyonda 2-4 hasta olan görülme sıklığı ile karşımıza çıkan nadir bir durumdur. Ancak bu hastalık en sık görülen mezenterik tümördür. Bu yazıda, nadir ve muhtemelen eşi olmayan bir şekilde bağırsak tıkanıklığının hem en sık hem de en az sıklıkta görülen sebeplerinin bir arada olduğu bir olgu sunuldu.

Anahtar kelimeler: Mezenterik fibromatozis, İnce bağırsak obstrüksiyonu, Inguinal herni

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INTRODUCTION

Small bowel obstruction remains a common surgical problem, with an estimated incidence of approximately 365,000 per year in the United States. There are many potential causes for bowel obstruction, including, but not limited to, adhesions, hernias, and malignancy, with adhesions being the most common in developed countries and hernias being the most common cause worldwide. In contrast, mesenteric fibromatosis is a rare benign neoplastic condition that can also cause bowel obstruction. We present the case of a 24-year-old African-American male who presented with bowel obstruction secondary to incarcerated inguinal hernia and mesenteric fibromatosis.

CASE REPORT

We present the case of an otherwise healthy 24-year-old African-American male who had presented within one week to two different outside health centers complaining of abdominal pain, nausea, and emesis. He had been diagnosed with acute gastroenteritis and discharged home both times. He presented to our institution with no resolution of his symptoms, and on examination, was found to have an incarcerated giant left scrotal-inguinal hernia. Plain films demonstrated dilated loops of small bowel with air-fluid levels (Figure 1).

He was taken to the operating room, where he underwent an uncomplicated Lichtenstein repair of a sliding left inguinal hernia containing viable sigmoid colon. He did well postoperatively and was discharged home on postoperative day two in good condition.

He presented to the emergency room again on postoperative day 13 with abdominal pain, nausea, and emesis. His vital signs were normal, and abdominal examination disclosed a diffusely tender abdomen without peritoneal signs. His left groin incision was unremarkable. A computerized tomography (CT) scan was obtained that demonstrated evidence of a small bowel obstruction (Figure 2).

He was admitted, and placed on bowel rest with intravenous fluid resuscitation and nasogastric tube decompression. He did not improve overnight, and a follow-up plain film of his abdomen showed persistently dilated bowel loops (Figure 3).

He was taken to the operating room for exploratory laparotomy, at which time he was noted to have a mass arising from the mesentery of his jejunum and locally invading the mesentery of his sigmoid colon. He was also noted to have numerous nodules within the small bowel mesentery. Frozen section of one of

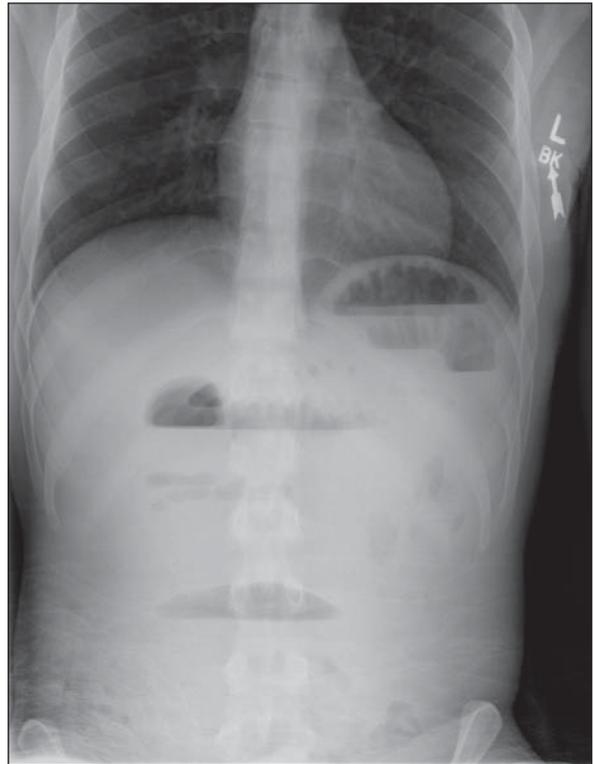


Figure 1. Plain films demonstrated dilated loops of the small bowel with air-fluid levels.



Figure 2. Representative axial CT image demonstrating bowel obstruction.

the nodules showed a benign reactive lymph node. The mass and associated portion of the jejunum and sigmoid colon were resected with primary small bowel and colorectal anastomoses. He had a slow but



Figure 3. Follow-up kidney-ureter-bladder (KUB) demonstrating persistently dilated bowel loops.

uneventful recovery, and was discharged home on postoperative day 8. The pathology demonstrated a spindle cell-type tumor consistent with mesenteric fibromatosis. Outside pathologic consultation agreed with this preliminary diagnosis.

In retrospect, our patient had no family history of colon cancer or desmoid tumors, etc., and an outpatient colonoscopy was arranged to rule out familial adenomatous polyposis.

DISCUSSION

Our patient is interesting in that he had both the most common and certainly one of the least common causes of bowel obstruction worldwide. Mesenteric fibromatosis is an extremely rare condition occurring in 2-4 patients per million. It accounts for 0.3% of all neoplasms, 8% of all fibromatoses, and less than 10% of all desmoids tumors^[1,2]. It is the most common primary mesenteric tumor. There is a slight female-to-male predominance, with a peak age of onset between 25 and 35 years of age. There is a reported association with trauma, estrogen exposure, and Gardener's syndrome. The latter is characterized by adenomatous polyposis of the gastrointestinal tract, desmoid tumors, osteomas, epidermoid cysts, lipomas, dental abnormalities, and periampullary carci-

nomas. The differential diagnosis includes gastrointestinal stromal tumors (GISTs), lymphomas, and fibrosarcomas. It is most commonly misdiagnosed as a GIST.

Mesenteric fibromatosis is a locally invasive disease that does not metastasize. Its clinical behavior ranges from rapid growth to regression. Treatment is surgical only for those lesions that are symptomatic, with a reported recurrence rate ranging anywhere from 10-90% with a 6% mortality rate. Adjuvant therapies have been described in the literature, including radiation, anti-estrogen medications (i.e. tamoxifen), nonsteroidal antiinflammatory drugs, and cytotoxic chemotherapy.

Certainly, a delay in diagnosis would not be surprising given the rarity of this condition. Furthermore, a delay in diagnosis in a patient with the simultaneous occurrence of both an incarcerated inguinal hernia and a primary mesenteric tumor is even more likely. Careful re-evaluation of this patient when he re-presented led to the correct management decisions and ultimate discovery of his second underlying pathology.

This case represents a rare and potentially unique simultaneous occurrence of both the most common as well as one of the least common causes of bowel obstruction.

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