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Case Report

Lymphoma presenting as small bowel obstruction: A case report

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ABSTRACT

Small bowel lymphoma accounts for 10%-30% of gastro-intestinal tumors. Clinical presentation is not specific. CT scans helps the diagnosis showing some characteristic appearances such as wall thickening of the loops, enlarged lymph nodes and infiltration of mesenteric fat. Pseudoaneurysmal intestinal dilatation is uncommon and may cause bowel obstruction which is a diagnostic and therapeutic emergency. We report the case of a 73-year-old man, who presented for occlusive syndrome revealing hail lymphoma. Pseudoaneurysmal intestinal dilatation is an uncommon presentation of lymphoma that should evoke the diagnosis especially when associated to wall thickening of the loops and lymphadenopathy.

Introduction

Small bowel lymphoma is a rare disease. The clinical presentation is not specific. Patients may have asthenia, vomiting, abdominal pain or weight loss. Rarely, it may be complicated by obstruction, intussusception, or perforation [1]. Imaging, especially CT scans has an important role in the diagnosis which must be confirmed histologically. The therapeutic management is multidisciplinary and the role of surgery has been reduced to complications [2].

Case Report

A 73-year-old man, chronic smoking, presented to the emergency department for intestinal obstruction with bilious vomiting associated to diffuse abdominal pain, with weight loss and asthenia.

On physical examination, the patient was febrile with temperature of 38°, the abdomen was distended, and there was a palpable mass in the right iliac fossa. The hernial orifices were free and the rectal bulb was empty on digital examination.

Laboratory data shows normochromic normocytic anemia with hemoglobin at 7 g/dL, a meal cell volume of 82 fl, a mean corpuscular hemoglobin concentration of 33 d/dL, a normal range of white blood cell (7000/μL) and a C-reactive protein value of 70 mg/L.

Enhanced abdominal CT scans at the portal phase was performed showing a small bowel distention (Fig. 1) upstream of pseudo-aneurysmal dilation of the last ileal loop measuring 43 mm in length (Fig. 2) without a sign of digestive distress. It was associated with parietal small bowel segmental thickenings with multiple coelio-mesenteric lymphadenopathy (Fig. 1,b).

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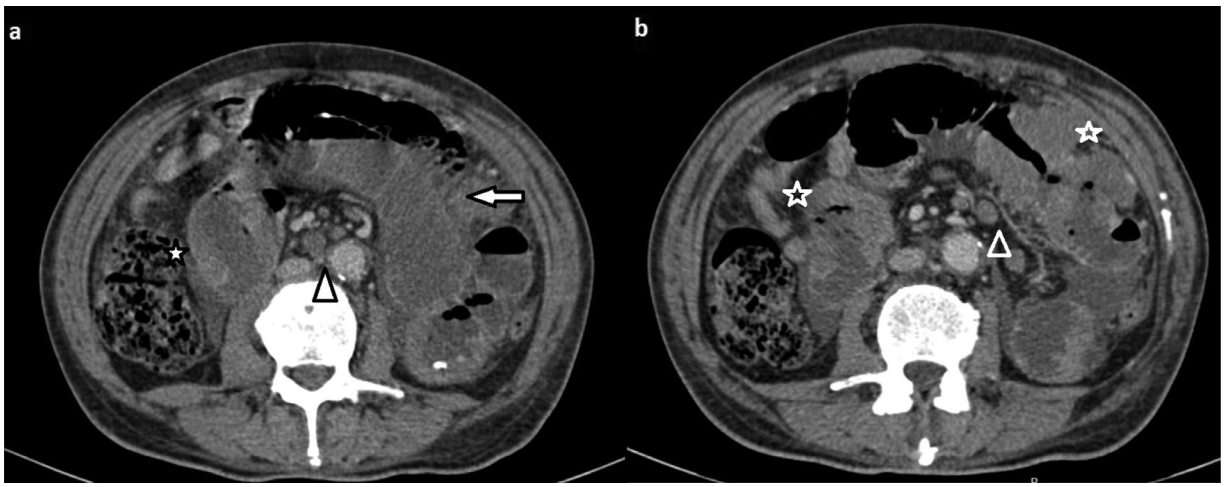

Fig. 1 – (a,b) Contrast enhanced abdominal CT scan at the portal phase showing small bowel distension with hydro aeric levels (arrow).Note wall thickening of ileal loop (star) with mesenteric lymphadenopathy and precaval lymph nodes (arrowhead).

The patient was transfused before surgery. Small bowel resection with termino terminal anastomosis was performed with biopsy of mesenteric lymphadenopathy. The histopathology examination with immuno-histochemical analysis of the surgical specimen was in favor of anaplastic large cell lymphoma type T.

Adjuvant chemotherapy was scheduled but unfortunately the patient died few days after the surgery.

DISCUSSION

Small bowel lymphoma accounts for 10%-30% of gastrointestinal tumors. Risk factors include helicobacter pylori (H. pylori) infection, human immunodeficiency virus (HIV), celiac disease, Campylo bacter jejuni (C. jejuni), Epstein-Barr virus, hepatitis B virus, human T-cell lymphotropic virus-1, inflammatory bowel disease, and immunosuppression [1,3].

The preferred sites of small bowel lymphoma are in order of frequency the ileum (60%-65%) and jejunum (20%-25%).

A certainty diagnosis is made by digestive endoscopy with biopsy and histological analysis. B-cells lymphomas are more frequent and T-cells are mostly associated with entheropathy [4].

Clinically, small bowel lymphomas may cause fever, diarrhea, malnutrition, and anemia. They may manifest by a palpable tumor, perforation or total intestinal obstruction, as in our patient [2,3].

On abdominal computed tomography, small bowel lymphomas can present as a dedifferentiated wall thickening of the loops ranging from 1 to 7 cm, or as a pseudo aneurysmal intestinal dilatation which is caused by tumor replacement of the muscularis propria and the destruction of the autonomic nerve plexus by the lymphoma. This may cause small bowel obstruction by extrinsic compression or infiltration of adjacent loops, as in our case, however, it remains a very rare consequence of lymphoma because of the lack of a desmoplastic reaction [3,4].

Other associated signs are enlarged lymph nodes and infiltration of mesenteric fat. Sometimes lymphoma can present as a mass causing an acute intussusception.

The CT scans should also check for signs of severity in the case of bowel obstruction. The most specific signs would be submucosal edema which results in a circumferential thickening in “target” appearance of loops with virtual walls, and especially the lack of enhancement of the intestinal wall and spontaneously hyperdense appearance of the digestive wall [1,4].

The main differential diagnoses are small bowel adenocarcinoma and intestinal wall thickening of infectious or inflammatory origin. Some criteria can guide the diagnosis. In lymphoma, wall thickening is circumferential segmental (long), single or multisegmental, moderately enhanced, and the junction with the normal intestinal segment is gradual [5].

The management of digestive lymphomas requires multidisciplinary consultation involving specialists in imaging, pathology of lymphomas, onco-hematologists, radiotherapists, and gastroenterologists.

Conventionally, the 3 therapies that can be administered to patients with digestive lymphoma are surgery, chemotherapy and radiotherapy.

Over time, the role of surgery has been reduced to the management of perforated or hemorrhagic complications that may require emergency resection of the causal lesion [6].

Conclusion

Small bowel lymphoma are rarely revealed by intestinal obstruction. The appearance in imaging is characteristic. Pseudoaneurysmal intestinal dilatation is an uncommon presentation that should evoke the diagnosis especially when associated to wall thickening of the loops and lymphadenopathy.

Fig. 2 – Contrast enhanced abdominal CT scan at the portal phase in axial (c) and coronal section (d), showing the transition zone (star) upstream of a pseudoanevrysmal dilatation of an ileal loop (arrow).

Patient consent statement

Written informed consent for publication was obtained from the patient.

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