Retroperitoneal liposarcoma causing upper gastrointestinal bleeding

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Abstract
Retroperitoneal sarcomas are rare tumors that usually present with abdominal discomfort and palpable mass. They rarely present with gastrointestinal bleeding. Here we report a case of retroperitoneal liposarcoma presenting with upper gastrointestinal bleeding secondary to gastric invasion. A 70-year-old lady with recurrent history of retroperitoneal liposarcoma and multiple previous surgical resections and radiotherapy presented with melena for one week. Upper endoscopy revealed a fungating mass in the gastric body, the biopsy of which confirmed liposarcoma. Few days later, the patient developed abdominal pain and fever. CT scan of the abdomen showed perforated stomach with abdominal collection. This responded well to drainage and intravenous antibiotics. Gastric perforation following diagnostic upper endoscopy is extremely rare and mostly associated with predisposing factor like malignant tumors. Endoscopists should be aware of the risk and avoid excessive air insufflation or looping of the scope in such patients.
Keywords: Retroperitoneal sarcoma, bleeding, endoscopy, perforation.

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1. Introduction

Soft tissue sarcomas are rare tumors accounting for 1% of adult malignancies. They are most commonly located in the extremities and the retroperitoneum. The most common types of soft tissue sarcomas are liposarcomas, leiomyosarcomas, undifferentiated pleomorphic sarcomas, and gastrointestinal stromal tumors (GIST). Retroperitoneal sarcomas are large, locally invasive and usually present with abdominal discomfort and palpable abdominal mass. They rarely present with gastrointestinal bleeding. There are few case reports in the literature of lower gastrointestinal bleeding associated with retroperitoneal sarcomas and only one report of upper gastrointestinal bleeding. Here, we report a case of retroperitoneal sarcoma with gastric invasion causing upper gastrointestinal bleeding that was later complicated by gastric perforation.

Case presentation

A 70-year-old woman presented with one week of melena. She had a background history of recurrent retroperitoneal liposarcoma for twenty five years with multiple previous resections and radiotherapy. On examination, she was pale and hemodynamically stable. Abdominal examination revealed a large palpable abdominal mass and digital rectal examination confirmed melena. The hemoglobin was 43 g/L and she was transfused with red blood cells and underwent an upper endoscopy which showed a large fungating mass with heterogeneous texture that occupied the gastric body and no stigmata of recent bleeding (Figure1). Biopsy was taken for histology which confirmed liposarcoma. CT scan of the abdomen showed a 20 cm retroperitoneal mass with mixed fatty and cystic components invading the stomach (Figure2). Five days following endoscopy, she developed abdominal pain and fever. Repeat CT scan of the abdomen revealed the same mass with evidence of gastric perforation and a collection under the left

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hemidiaphragm. A drain was inserted which drained 250 ml of foul-smelling brownish fluid that grew a mixture of streptococci and anaerobes. IV antibiotics were given with good response. Due to the extensive history of recurrent liposarcoma and as she was not a surgical candidate, the decision for palliative treatment was made.

Discussion

Soft tissue sarcomas are rare tumors accounting for 1% of adult malignancies. Retroperitoneal sarcomas account for 15% of all adult soft tissue sarcomas with liposarcoma and leiomyosarcoma being the most common types and they are usually diagnosed late when they become large enough to cause symptoms due to the capacity of the abdominal cavity to accommodate the enlarging mass. They can also be locally invasive. Most common symptoms are abdominal discomfort and palpable mass. Other symptoms include weight loss and lower limb neurological signs. Rarely, they present with gastrointestinal bleeding due to invasion of the gastrointestinal tract or due to the development of varices.

There have been multiple case reports of gastrointestinal bleeding secondary to duodenocaval fistula occurring as a late complication of retroperitoneal sarcoma resection and radiotherapy and two cases of lower gastrointestinal bleeding related to retroperitoneal sarcoma. [1-3] To our knowledge, there has only been a single prior case report of upper gastrointestinal bleeding secondary to gastric invasion of retroperitoneal sarcomas [4].

The overall 5-year survival rate of retroperitoneal sarcomas ranges between 20-69% and depends on tumor resectability and histologic grade of differentiation [5-7]. Lymph node metastasis is uncommon while hematogeneous spread occurs in 20-30% of patients, most commonly to the lungs and the liver. Surgical resection has traditionally been the only potentially curative approach. However, because of the large size and anatomic complexity of these tumors at diagnosis, a complete resection with microscopically negative margins is often not achieved and locoregional recurrence is common. The role of adjuvant and neoadjuvant radiotherapy or chemotherapy continues to be debated [8,9].

Our case was complicated by gastric perforation. The perforation rate in diagnostic endoscopy is reported to be 0.01%-0.03% and most commonly occurs in the esophagus [10]. The mechanism of perforation in diagnostic endoscopy is too much sheer pressure created by insufflation on the wall of the gastrointestinal tract. Upper gastrointestinal malignancies and previous radiation therapy are known risk factors for iatrogenic perforation. In patients with such risk factors, the endoscopist needs to avoid excessive air insufflation and looping of the scope in order to prevent this most feared complication.

Figures:

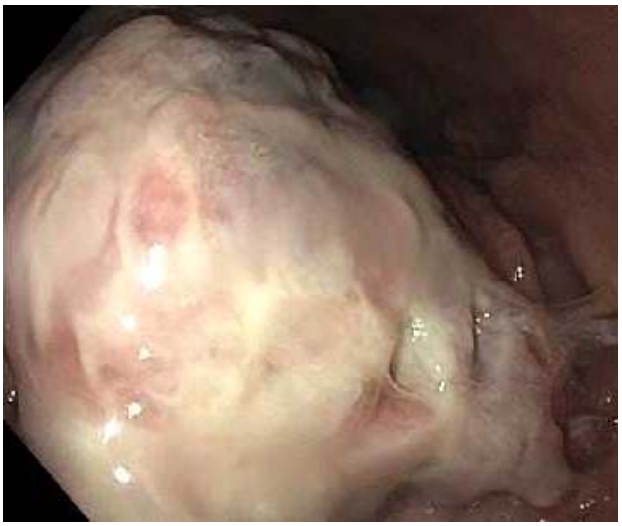

Figure 1: Endoscopy showing a large fungating mass with heterogeneous texture in the gastric body.

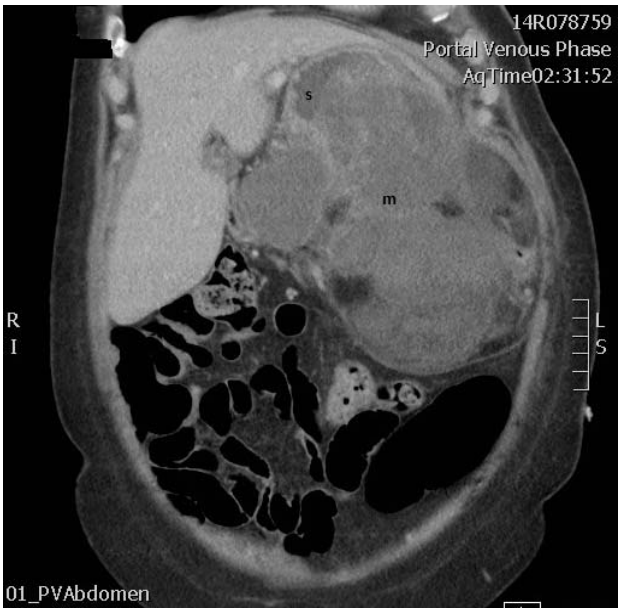

Figure 2: CT scan showing large retroperitoneal mass (m) with mixed fatty and cystic components invading the stomach (s).

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سرطان الدهون خلف الصفاق يتسبب في حصول نزيف هضمي علوي

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الملخص

إنَّ سرطانات الساركومة في تجويف خلف الصفاق من الأورام النادرة الحدوث، وعادة ما تتسبب بآلام في البطن أو الإحساس بوجود كتلة في البطن؛ ولكنها نادراً ما تتسبب في حصول نزيف هضمي،وفي هذا المقال نعرض حالة طبية نادرة لمريضة كانت تعاني من سرطان دهني خلف الصفاق تسبب بحصول نزيف هضمي علوي نتيجة اختراق الورم لجدار المعدة،والمريضة كانت تبلغ من العمر سبعين عاماً، وقد كانت تعاني في السابق من سرطان دهني خلف الصفاق تم علاجه بالاستئصال الجراحي والعلاج الشعاعي،وحضرت لطوارئ المستشفى تشكو من براز أسود اللون لمدة أسبوع، وبعد إجراء تنظير للمعدة تبين وجود كتلة دهنية كبيرة في جسم المعدة، وقد تم أخذ عينات للأنسجة منها التي أثبتت وجود سرطان دهني،وبعد عدة أيام شكت المريضة من آلام في البطن وارتفاع في الحرارة،وتم عمل صورة طبقية للبطن وتبين وجود ثقب في المعدة مع خراج في البطن تمت معالجته بالتصريف و المضادات الحيوية الوريدية،وإن حصول ثقب في المعدة نتيجة عملية تنظير تشخيصي للمعدة هو أمر نادر الحدوث، وفي الغالب يكون لدى المريض عامل مساعد على حصول هذه المضاعفة مثل: وجود سرطان في المعدة، ويجب على الطبيب عند عمل منظار المعدة في هذه الحالات أخذ هذا الخطر بعين الاعتبار، وتجنب النفخ الزائد للمعدة أو التفاف المنظار بشكل حلقي داخل المعدة.

الكلمات الدالة:ساركومة خلف الصفاق، نزيف، تنظير، ثقب.