SPLENOSIS MIMICKING GASTRIC GIST: CASE REPORT AND LITERATURE REVIEW

Esplenose mimetizando gist: relato de caso e revisão da literatura

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INTRODUCTION

Splenosis is the “seeding” or auto transplantation of splenic tissue following splenic trauma or surgery. There is implantation of splenic tissue in the form of encapsulated nodules most often in the peritoneal cavity, but it can also occur in the pleural cavity, pericardium, lung, abdominal wall, subcutaneous tissue and in the brain. In the abdomen, it is usually discovered incidentally as an asymptomatic mass.

Gastrointestinal stromal tumor (GIST) is the most common mesenchymal malignancy of the gastrointestinal tract, and the stomach is the most common primary site. Symptoms include bleeding, pain, discomfort or an abdominal mass with no symptoms. Surgical resection is the preferred treatment option for resectable GISTS, particularly localized primary tumors. Since most GISTS are submucosal, a definitive pathological diagnosis often cannot be made before surgery.

It is reported a case of a gastric submucosal lesion that was initially suspected for gastric stromal tumor by upper gastrointestinal endoscopy and endoscopic ultrasonography (EUS), and splenosis was finally diagnosed after computed tomography (CT) scan and a Tc-99m labeled heat-denatured red blood cell scintigraphy.

To our knowledge, there are no reported cases of splenosis mimicking a gastric GIST.

CASE REPORT

A 74-year-old male patient was admitted for elective treatment of a gastric submucosal lesion found at upper gastrointestinal endoscopy. He complained of vague upper abdominal pain. Endoscopic ultrasonography revealed a homogeneous bilobular lesion, located in the proper muscle layer of the gastric fundus, measuring 36x25mm and 20x21mm (Figure 2). Since there were large vessels above the lesion, and a high probability of being a GIST warranting surgical resection. A fine-needle aspiration biopsy was not performed.

The patient’s past surgical history was notable in that he had undergone a left colectomy for colorectal cancer 20 years earlier. He also underwent a second operation one year after due to a resectable local recurrence, on which occasion his spleen was also removed.

He had no history of weight loss nor any intestinal symptoms or signs. His physical examination revealed only a large abdominal incisional hernia. Laboratory work-up was unremarkable.

Since the submucosal lesion was highly...
suspicious for a stromal tumor, abdominal CT scan was performed for staging. Despite being done without intravenous contrast injection due to past history of allergy, CT scans revealed two abdominal masses measuring 4.0 cm and 2.5 cm attached to the gastric fundus suggesting splenosis (Figure 3A, 3B and 3C).

A technetium Tc 99m-labeled red blood cell radionuclide scan showed splenic tissue in the epigastrium, left lower and upper quadrants, confirming the diagnosis of splenosis (Figure 4).

Colonoscopic surveillance showed a small colonic polyp found later in the pathologic examination to be a hamartomatous.

The patient was discharged from the hospital since at that moment, he refused surgical treatment of the incisional hernia.

**DISCUSSION**

Splenosis can be detected in 16 - 67 % of patients who experienced traumatic splenic rupture\(^{18}\). Usually it does not lead to any clinical symptoms\(^{2,15,16}\), especially thoracic splenosis\(^{2}\). However, some patients may experience a painful abdominal or pelvic mass\(^{12}\). More rarely, it can lead to complications such as intestinal obstruction\(^{1}\), gastrointestinal bleeding\(^{1}\) and the relapse of hematological diseases, mainly autoimmune thrombocytopenia\(^{6}\). Even intraperitoneal hematoma from trauma to splenic implant and...
undergo unnecessary surgical resection. Diagnostic refinement in this case not only allowed diagnosis in patients with previous spleen surgery. Splenosis should be considered as an alternative stromal tumors may be very difficult to confirm and be made complications or when the accurate diagnosis cannot be reserved for symptomatic patients with hematological diseases

Surgical removal of splenosis is considered unnecessary. The implanted splenic tissue offers some degree of protection against bacterial infection lowering the frequency of post-splenectomy sepsis. This may be especially important in patients with hematological diseases. Surgical treatment therefore should be reserved for symptomatic patients complications or when the accurate diagnosis cannot be made.

As illustrated by this report, diagnosis of gastric stromal tumors may be very difficult to confirm and splenosis should be considered as an alternative diagnosis in patients with previous spleen surgery. Diagnostic refinement in this case not only allowed accurate diagnosis but also prevented the patient to undergo unnecessary surgical resection.

REFERENCES