Published online: 2019-04-02

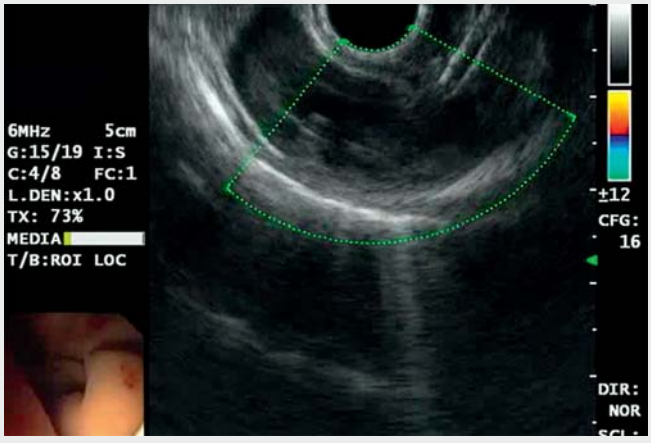
Gastric fundal splenosis presenting as a stromal tumor and diagnosed by endoscopic ultrasound-guided SharkCore biopsy

The term splenosis refers to a rare condition, consisting of ectopic autotransplantation of splenic tissue into cavities of the human body or parenchymatous organs after splenic trauma or splenectomy [1]. The most frequent implantation sites include the greater omentum, the serosa of the small and large intestines, the parietal peritoneum, the mesentery, and the diaphragm. Less common sites are the liver, pancreas, stomach, bladder, gallbladder, kidney, ureter, and uterus [2]. It is usually asymptomatic, discovered incidentally during imaging or surgery. However, in some cases it has been associated with abdominal discomfort, gastrointestinal bleeding, abdominal pain, infarction of an intraperitoneal tissue nodule, and hydronephrosis due to ureteric compression [2]. Given the absence of potential malignancy, splenosis does not require follow-up or surgical treatment, except in patients who are symptomatic [3].

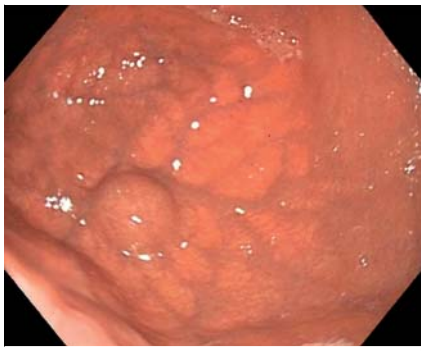
We report the case of a 49-year-old woman who was referred to our center complaining of abdominal bloating, dyspepsia, and gastric fullness for 2 years. Her medical history included splenectomy, performed in another hospital, following abdominal trauma suffered in a car accident 20 years previously, and the removal of a dysplastic nevus. Her physical examination showed no abdominal masses, only mild hepatomegaly, and no tenderness or tension. Her laboratory test results were normal.

Upper gastrointestinal endoscopy showed the presence of a round mass in the gastric fundus, measuring 20 mm, covered by normal mucosa and of hard consistency at biopsy (▶ **Fig. 1**). Given that it was suspected that this was a gastrointestinal stromal tumor (GIST), an endoscopic ultrasound (Olympus UCT 140 linear array echoendoscope) was performed, which showed a 2-cm hypoechoic mass with smooth margins originating from the muscular layer. Doppler ultrasound showed no pathological vascularization (▶ **Fig. 2**) and a fine needle biopsy (22-gauge SharkCore needle) was taken (▶ **Video 1**).

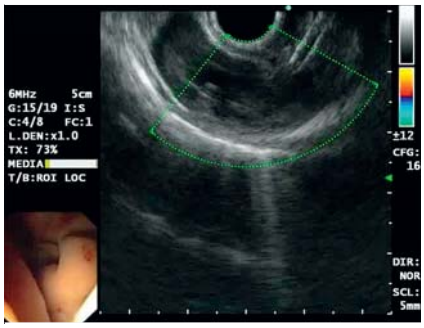
Histological examination showed connective tissue including lymphocytes, which were also found in nodular aggregates, and lacunar spaces lined by endothelium (immunoreactive for CD34)



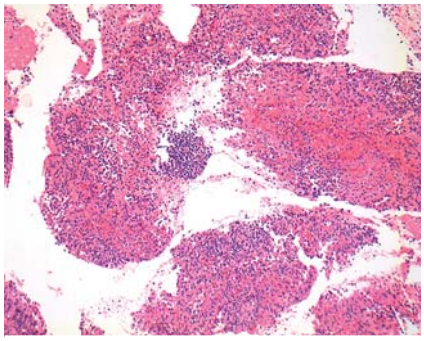
▶ **Video 1** Gastric fundal splenosis presenting as a stromal tumor and diagnosed by endoscopic ultrasound-guided SharkCore biopsy.



▶ **Fig. 1** Gastroscopy image showing a 2-cm round mass covered by normal mucosa in the gastric fundus.



▶ **Fig. 2** Image during endoscopic ultrasound-guided fine needle biopsy showing the 2-cm hypoechoic mass originating from the muscular layer with no pathological vascularization on Doppler examination.



▶ **Fig. 3** Histological appearance of the biopsy showing lymphoreticular tissue including sinusoidal vascular structures, resembling splenic parenchyma (hematoxylin and eosin [H&E] stained; original magnification ×20).

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(▶**Fig. 3**). This morphological picture was consistent with splenic tissue so, given the location of the lesion and the medical history, the diagnosis of gastric splenosis was proposed.

Endoscopy_UCTN_Code_CCL_1AB_2AD_3AF

Competing interests

None

The authors

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DOI https://doi.org/10.1055/a-0866-8930
Published online: 1.4.2019
Endoscopy 2019; 51: E160–E161
© Georg Thieme Verlag KG
Stuttgart · New York
ISSN 0013-726X

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