Splenosis in gastric wall mimicking gastrointestinal stromal tumor

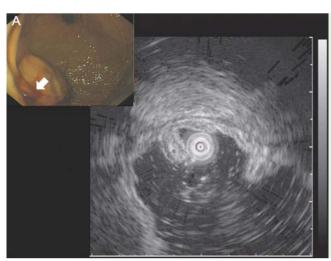


Fig. 1 Gastroscopic view in a 42-year-old man with melena and vague epigastric pain and a history of splenectomy. Note the submucosal mass with superficial bleeding ulcer (arrow). Endoscopic ultrasound (EUS) revealed that the mass was caused by extragastric compression.

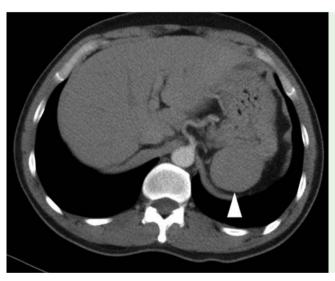


Fig. 2 Computed tomography (CT) demonstrating an exogenous enhancing mass (arrowhead).

A 42-year-old man attended our outpatient department with melena for 1.5 years and vague epigastric pain for 2 days. He had a history of splenectomy because of trauma 17 years ago. Physical examination did not reveal any abdominal mass or enlargement of Virchow's lymph nodes. A rectal digital examination and blood tests were also unremarkable. Gastroscopy revealed a submucosal mass with a superficial bleeding ulcer in the gastric fundus. Endoscopic ultrasound (EUS) showed that the structure of the

gastric wall was intact but a giant mass was present due to extragastric compression at a few sites. The mass was closely adherent to the gastric wall (**Fig.1**). Contrast computed tomography (CT) demonstrated an exogenous enhancing mass over the fundus of the stomach approximately 5 cm in size, with a complete mucosal layer and boundaries clearly demarcated from the surrounding tissues. No obviously enlarged lymph nodes were seen (**Fig.2**). Laparotomy revealed a red mass on the gastric wall

of the fundus. Partial gastrectomy was carried out, with negative margins established by frozen section examination. Gross inspection of the specimen showed sinusoids on cross-section. Finally, pathological examination confirmed the diagnosis of ectopic spleen. The patient had a rapid recovery, with disappearance of his symptoms.

Splenosis is a rare condition involving autotransplantation of splenic tissue to ectopic multiple locations, including kidney, omentum, peritoneum, and liver [1,2]. The present report describes a rare case of splenosis involving the gastric wall, that mimicked gastrointestinal stromal tumor (GIST). The symptoms of splenosis depend on the location of the ectopic spleen. An ectopic spleen presenting as an intraperitoneal mass may be confused with some malignant tumors, or manifest as acute abdomen, such as torsion of the splenic implant and hemorrhage of the digestive tract owing to the invasion of the bowel wall by the ectopic spleen. It is usually difficult to make a definite diagnosis of splenosis preoperatively. However, splenosis should be considered in the differential diagnosis in patients who have a history of splenectomy, with absence of Howell-Jolly bodies on the peripheral blood smear [3]. Some imaging tests, including CT, magnetic resonance imaging (MRI), 99 mTc-labelled erythrocytes, and Doppler ultrasonography are useful in distinguishing the condition from other diseases [4]. In the present case, a submucosal mass with superficial bleeding ulcer in the gastric fundus was found and preoperatively diagnosed as GIST. EUS plays an important role in localization and elucidating the characteristics of submucosal gastric lesions [5]. In our case, the preoperative EUS revealed that the structure of the gastric wall was intact and the mass was due to extragastric compression. This finding is in accordance with the diagnosis of splenosis in the gastric wall. However, since the lesion had caused chronic hemorrhage, the possibility of malignancy could not be excluded completely. Therefore laparotomy was carried out.

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Competing interests: None

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References

- 1 *D'Angelica M, Fong Y, Blumgart LH.* Isolated hepatic splenosis: first reported case. HPB Surg 1998; 11: 39-42
- 2 Page JB, Lenz DL, Wong C. Right-sided intrarenal splenosis mimicking a renal carcinoma. Sci World J 2006; 6: 2442 – 2444

- 3 *Celiloglu M, Dogan E, Kocoglu S* et al. Splenosis presenting with adnexal mass: a case report. Arch Gynecol Obstet 2004; 270: 129 130
- 4 Tsitouridis I, Michaelides M, Sotiriadis C et al. CT and MRI of intraperitoneal splenosis. Diagn Interv Radiol 2010; 16: 145 – 149
- 5 Deutsch JC, Sandhu IS, Lawrence SP. Splenosis presenting as an ulcerated gastric mass: endoscopic and endoscopic ultrasonographic imaging. J Clin Gastroenterol 1999; 28: 266-267

Bibliography

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