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An Unexpected Gastric Subepithelial Mass

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A 63-year-old man came to our observation complaining of symptoms referable to gastroesophageal reflux disease. No epigastric pain, postprandial fullness, or vomiting were present during clinical examination. His history did not show noteworthy pathologies. The patient did not follow any pharmacological therapy, and there was no family history for neoplasia of the digestive system. An esophagogastroduodenoscopy was performed, which showed, in the insufflation phase, a 'bombè' lesion occurring in the fundus driven to subepithelial lesions (SELs), settled along the little curve and miming an extrinsic compression [Figure 1]. Laboratory tests were all normal, including liver function tests, while the oncological markers (carcinoembryonic antigen and serum carbohydrate antigen 19-9) were both negative.

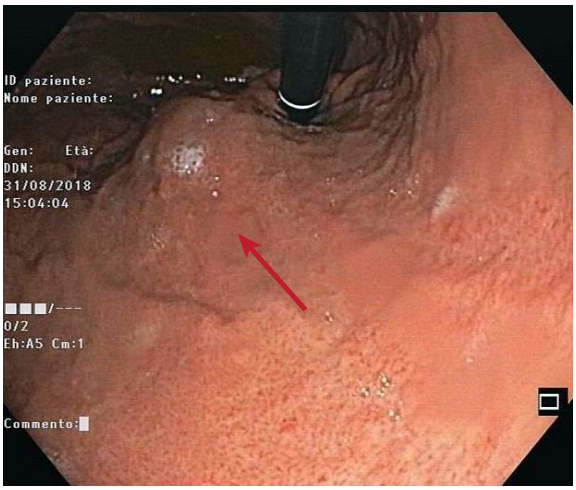

Figure 1: Gastroscopy, using position in retroflection, revealed a protruding mass with overlying normal mucosa in the stomach (red arrow).

An abdominal computed tomography (CT) with contrast agent was performed, highlighting two fluid collections, of which the larger mass (48 × 43 mm) lay in the right lobe and the smaller mass (33 × 27 mm), responsible for compression on the gastric wall, in the left lobe [Figure 2].

Question

1. What is the most likely clinical diagnosis?
   a) Leiomyoma.
   b) Gastrointestinal stromal tumors (GISTs).
   c) Simple hepatic cysts.
   d) Lipoma.

Answer

c) Simple hepatic cysts.

DISCUSSION

Several cases and series have described simple liver cysts, but only a few studies, including our case, have described gastric compression due to these cysts. When performing upper GI endoscopy, SELs are frequently observed,[1] and these can be confirmed using imaging techniques. SELs compress the gastric wall and may be non-neoplastic or neoplastic, benign (leiomyoma or lipoma), or malignant (GISTs).[1] These lesions can be differentiated using endoscopic ultrasound (EUS) with a fine-needle aspirate. Among these lesions, simple hepatic cysts represent a rare and scarcely reported event in the literature. Generally, hepatic cysts are found incidentally during imaging studies performed for other reasons and show a signal similar to water on CT and magnetic resonance imaging and no enhancement

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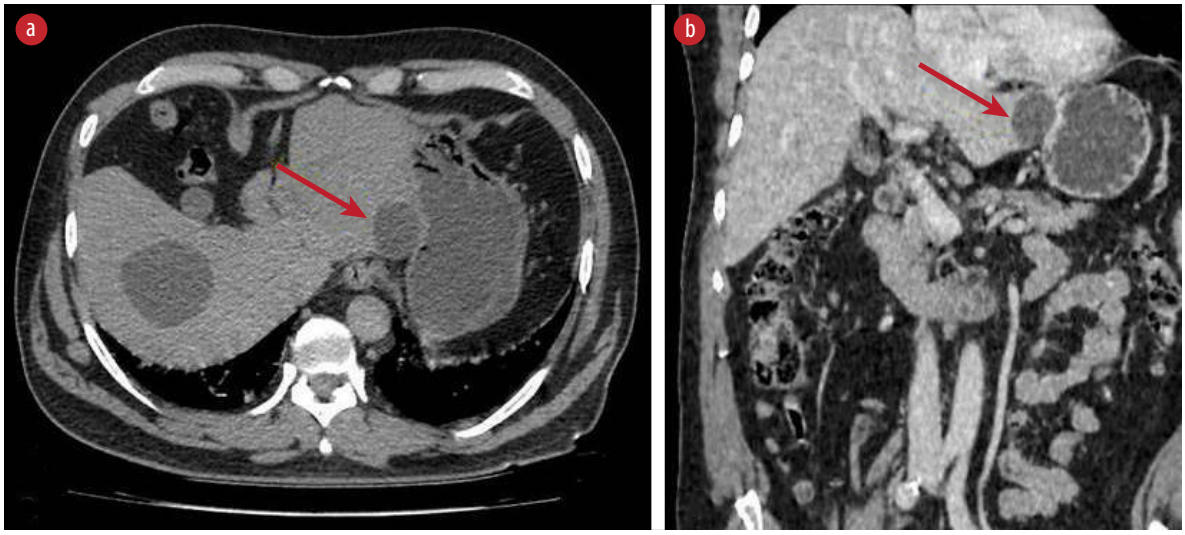

Figure 2: Abdominal computed tomography **(a)** axial and **(b)** coronal views showed a simple hepatic cyst of the left lobe that compressed the stomach wall (red arrows).

using contrast agents.[2,3] It is necessary to be careful when using endoscopy, EUS, and abdominal CT to detect lesions. This is because a previous study has reported that a hepatic cyst compressing the stomach was misdiagnosed as a tumor (gastric duplication cyst or a GIST with necrosis) and then correctly identified during the operative stage.[4] No genetic transmission has been reported in simple hepatic cysts, which are found only in the liver. These cysts are congenital and configured as biliary malformation, with the characteristic of not being generally in communication with the intrahepatic biliary tree. These cysts may be round or ovoid, and the wall is composed of a cuboidal biliary epithelium while the cavity is filled with serous fluid. Simple liver cysts can be single or multiple and range in size from a few millimeters to > 20 cm in diameter. However, most reported cysts measure < 3 cm, are generally asymptomatic, and are found in adults older than 50 years, with a mild prevalence in females (female to male ratio is 1.5:1).[5] The management of symptomatic cysts includes percutaneous drainage with aspiration and injection of sclerosing agents, such as ethanol, ethanolamine oleate, and minocycline hydrochloride. However, these techniques entail high recurrence rates, a risk of infection, and time limitations. For these reasons, the approach illustrated in this work is reserved for patients who cannot undergo the surgical pathway, generally indicated in case of complications (growth, intracystic bleeding, and rupture bacterial infection).[6] In conclusion, when faced with subepithelial lesions or injuries compressing the gastric wall, imaging methods are fundamental in the differential diagnosis between tumors and hepatic cysts, which are much rarer. These last ones should not be treated immediately unless they show complications. Otherwise, like in our case, it should be preferable to proceed with conservative and observational treatment over time.

Disclosure

The authors declared no conflicts of interest. Written informed consent was obtained from the patient before the procedure.

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