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PICTURES IN DIGESTIVE PATHOLOGY

Gastric schwannoma presenting as a casual ultrasonographic finding

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INTRODUCTION

Gastric schwannoma is an extremely rare neoplasm (0.2% of all gastric tumors), with neural origin and rising from the nerve plexus of the gastrointestinal tract. It is usually a benign tumor, presenting as solitary o multiple lesions and sometimes associated to neurofibromatosis (1).

CASE REPORT

An 80-year-old woman with past history of elevated liver enzymes presented with bilateral lower-extremity edema and ascites. In laboratory tests, it was to highlight the presence of cholestasis and positive antimitochondrial antibodies (AMA-M2).

During ultrasonography, signs of chronic liver disease were observed, as well as portal hypertension and ascites. We also could see a heterogeneous hypoechoic mass (56 x 45 mm) located on the posterior wall of the stomach (Fig. 1). In an upper endoscopy this lesion was described as an extrinsic compression, and in a computed tomography as an extraluminal gastric tumor (Fig. 2). Endoscopic ultrasound could not be performed because of the clinical situation of the patient so an ultrasound-guided percutaneous biopsy was carried out. The pathologist observed a mesenchymal neoplasm with fusiform cells with intense S-100 protein expression, as well as negative actin, desmin, CD34 and CD117, compatible with a benign peripheral nerve sheath tumor (schwannoma).

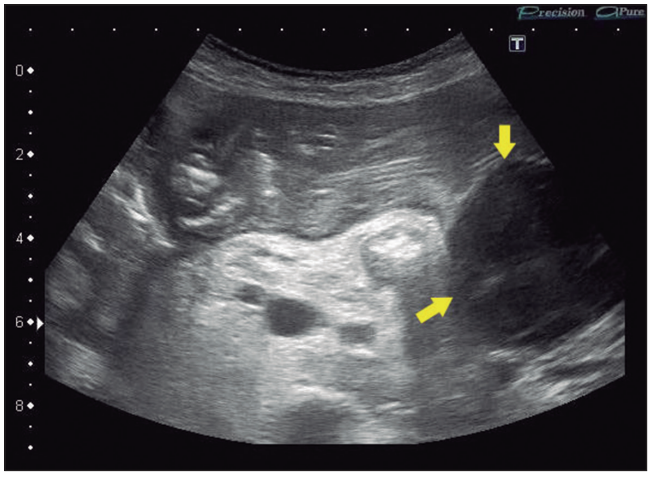

Fig. 1. Ultrasound: in an epigastric transverse plane a hypoechoic mass can be seen on the posterior wall of the stomach (arrows).

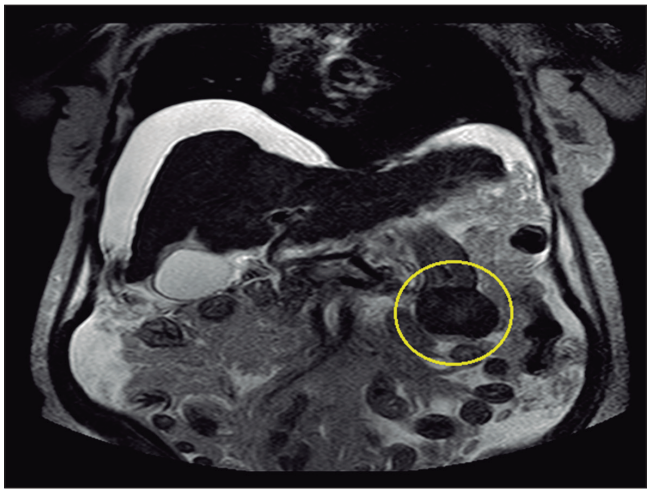

Fig. 2. Abdominal computed tomography (T2 sequence, coronal view): a round extraluminal gastric mass can be seen (circle).

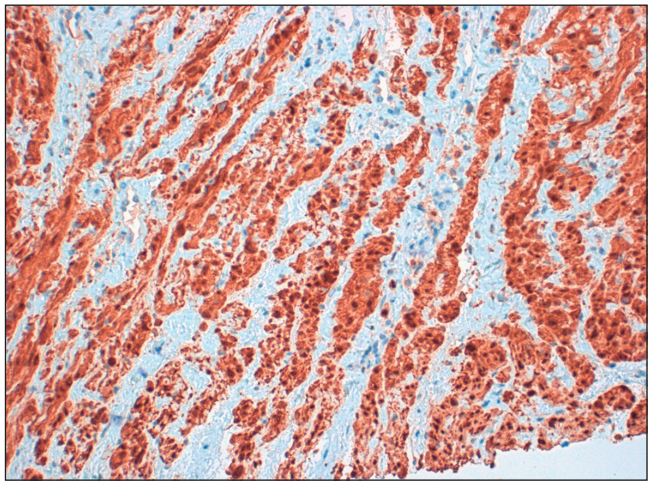

Fig. 3. Biopsy (immunohistochemistry (20x)): intense nuclear and cytoplasmic s-100 positivity seen in fusiform cells (groups of cells turned into brown color by the marker).

Conservative management was decided as surgical treatment was rejected.

DISCUSSION

Diagnosis of gastric schwannoma is usually casual as clinical evolution of this tumor is silent. Exceptionally, compression or bleeding secondary to ulceration can be seen in those with endoluminal location (2). Endoscopic ultrasound is the election diagnostic tool (3) and differential diagnosis must be established with other gastric submucosal tumors: gastrointestinal stromal tumor (GIST), leiomyoma and leiomyosarcoma. Definite diagnosis requires biopsy and immunohistochemical analysis because its ultrasonographic characteristics and location do not differ from GIST (4). The main difference is that schwannoma presents intense S-100 expression and is negative for CD117 and CD34 (5). In symptomatic patients or cases of malignization surgery is the preferred treatment.

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