Gastric lipoma – an unusual cause of upper gastrointestinal bleeding

Dear Editor,

Gastrointestinal lipomas are benign, non-epithelial, slowly growing tumors. The majority are located in the colon (60-75%), followed by the small bowel (20-25%). Gastric lipomas (GLs) are rare and usually located in the antrum (1,2).

Case report

We report the case of a 44-year-old man that was admitted to the emergency department with a history of tiredness and intermittent melena for the previous month. He denied abdominal pain, dyspeptic symptoms, and anorexia or weight loss; there was no intake of non-steroidal anti-inflammatory drugs. Past medical history was significant for arterial hypertension, obesity and sleep apnea syndrome. An esophagogastroduodenoscopy (EGD) performed 5 years earlier was described as normal. Physical examination was unremarkable, except for pallor and obesity (body mass index 34 kg/m²). Laboratory tests showed a decreased hemoglobin (7.8 g/dL); the remaining blood cell count and chemistry profile were within normal limits. Emergency EGD revealed a subepithelial mass at the gastric fundus, approximately 4 cm in diameter, with a central ulceration where a yellowish tissue suggestive of fat was protruding (Fig. 1) – a lipoma or liposarcoma was suspected. An endoscopic ultrasonography (EUS) was performed, showing a hyperechoic mass within the submucosal layer, mildly heterogeneous at the luminal border (Fig. 2). A computerized tomography (CT) was also performed which revealed a homogeneous mass with fat density in the gastric fundus, with well demarcated margins, with a notch on the side facing the lumen (corresponding to the ulceration saw at EGD); no secondary lesions were present (Fig. 3). The patient was submitted to partial gastric resection (Fig. 4) and was discharged 10 days after the procedure; no incidents were reported. Histological examination confirmed the diagnosis of submucosal lipoma and ulceration of the overlying mucosa (Fig. 5).
Gastric lipomas (GLs) are rare, representing 3% of all benign tumors of the stomach and 5% of all gastrointestinal lipomas; 75% are located in the antrum and the vast majority (95%) are submucosal (1). Although they are usually asymptomatic and detected incidentally, severe symptoms can occur with larger lesions (> 2 cm), such as hemorrhage, obstruction or abdominal pain. Gastrointestinal hemorrhage is the most common symptom (in over 50% of patients), occurring due to pressure necrosis and ulceration of the mucosa (3).

At EGD, GLs appear as smooth, soft masses with a normal overlying mucosa; a yellowish color, the “tenting” sign (easy retraction of the overlying mucosa with a biopsy forceps) and the “cushion” sign (impression after compressing the mass with the biopsy forceps) help to identify these lesions (1). Biopsy is usually not diagnostic due to the submucosal nature of the lesion.

CT is highly specific for lipomas (4), showing well circumscribed submucosal masses with uniform fat density (-70 to -120 Hounsfield Units), although thin fibrous septations inside the mass are not uncommon (5). EUS has been reported for the excellent diagnosis accuracy of GLs, the typical findings being homogeneous hyperechoic tumors within the submucosal layer.
er (6). If ulceration is present, the lipomatous characteristics may be masked on both exams, due to inflammation and scar into the tumor (4), as occurred in our case.

The treatment of GLs is still controversial. For small, submucosal lesions, endoscopic resection is a safe procedure, although mere observation is a valid option, because malignant degeneration has not been reported (7). For the majority of authors, surgical resection remains the treatment of choice for larger, symptomatic GLs (1), but the endoscopic resection has gained importance even in this field. Reports of successful endoscopic removal, without major complications (hemorrhage or perforation) have been published (8).

References