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Primary gastric rhabdomyosarcoma. A rare cause of an upper gastrointestinal bleeding

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Dear Editor,

Adenocarcinoma accounts for 90% of malignant gastric tumours. Lymphomas, gastrointestinal stromal tumours (GIST) and other less frequent tumours account for 10%. However, rhabdomyosarcoma (RMS) remains a rare cause within the broad differential diagnosis of gastric lesions.

Most cases of gastrointestinal RMS in adults are metastatic disease so primary RMS is extremely rare. A few cases reports of esophageal and gastric RMS have been published (1).

This is a 76-year-old patient with a history of oncological oncology of poorly differentiated lung adenocarcinoma T2N1M0 in 2008 treated with surgery with no signs of recurrence.

She presented to emergency with occasional episodes of melena and iron deficiency anemia for the last 3 months. The laboratory findings showed moderated anemia.

Gastroscopy was performed and a prominent submucosal and ulcerated bulge was observed at the posterior wall of the gastric body and fundus (Fig. 1A). A histologic examination reveled tissue fragments composed of small round spindle-shaped cells. Tumor cells had atypical nuclei showing dense chromatin ad pale to eosinophilic cytoplasm. Immunohistochemically, the tumor was positive for AE1/3, desmin, myogenin and CD56 (Fig. 1B and 1C). Patient was diagnosed with primary gastric RMS. Thoraco-abdominopelvic CT showed a locally advanced stage (T2 N1M0) (Fig. 1D)

Because of her age and stage, she opted for surgery, performing a laparoscopic total gastrectomy with Roux-en-Y anastomosis and D1 lymphadenectomy without complications. Finally, she was reclassified as T2N0, so adjuvant treatment was not prescribed. Nowadays, the patient is progressing satisfactorily with clinical and biochemical resolution and radiological controls every 3 months during the first year.

Gastric rhabdomyosarcoma is a very rare malignant pathology with a high rate of aggressiveness. There are no clinical guidelines or protocols for the management of adult patients with GR (2). An early diagnosis can change the course of the disease requiring multidisciplinary treatment based on radical surgery in combination with adjuvant therapy, improving patient outcomes.

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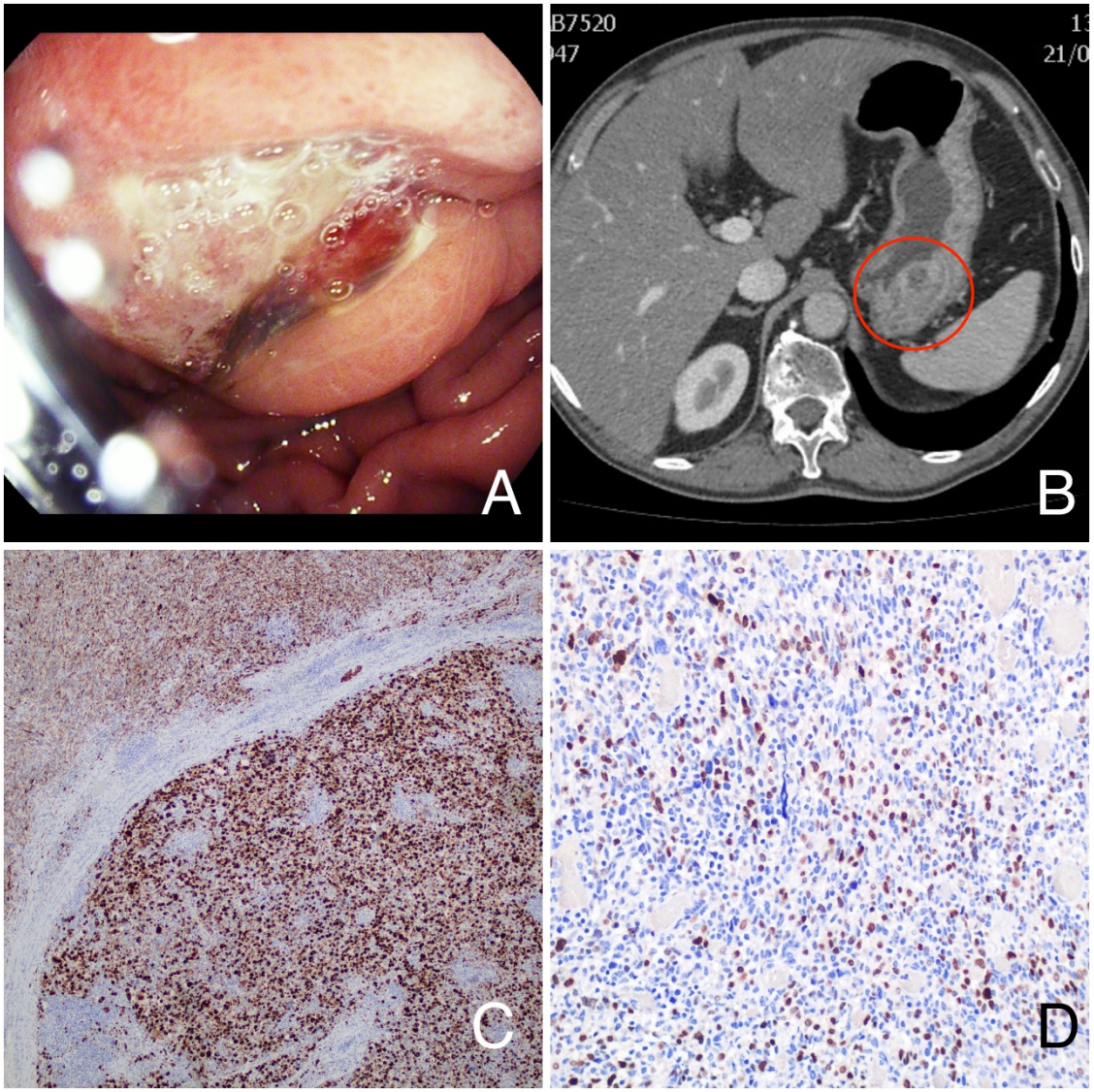

Figure 1. (1A) Gastroscopy shows a ulcered submucosal bulge at the posterior wall of the proximal gastric body. (1B) Abdominal enhancement computed tomography shows a thickened proximal wall of the gastric body with a tumor which may originate from the muscularis propia of the stomach. Immunohistochemically, the tumor was focally positive for Desmin (1C) and Myogenin (1D).