

Case Report of a Gastric GIST Post Sleeve Gastrectomy

M. Lazrak^{1, 2*}, S. Habibi¹, T. Souiki², K. Ibnmajdoub², I. Toughrai², K. Mazaz², A. Bouayed¹

¹Visceral Surgery Department of the Hospital of the Country Salonais, France

²Visceral Surgery Department of the Hassan II Hospital Center Fes, Morocco

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*Corresponding author: M. Lazrak

Visceral Surgery Department of the Hospital of the Country Salonais, France

Abstract

Case Report

Gastrointestinal stromal tumor is, by definition, a mesenchymal tumor that develops at the expense of the digestive tract. Quite rare, represents 0.1-3% of gastrointestinal malignancies. These tumors are more commonly located in the stomach or small intestine than elsewhere in the abdomen. They are derived from Cajal cells or a precursor thereof, and are typically of the CD117 / KIT + (95%) and DOG-1 + (95%) phenotype. They very frequently exhibit activating mutations of the genes encoding the KIT or PDGFRA tyrosine kinase receptors. They can occur at any age, but mainly in middle-aged and elderly people. We report the case of a 59-year-old patient with a history of femoroiliac thrombosis treated by implantation of a prosthesis in 2018 with long-term antiplatelet therapy, morbid obesity operated on in 2020, the procedure consisted of Sleeve gastrectomy, hyperparathyroidism on a single lower left adenoma, resected with good control of PTH postoperatively. The patient was known to have a gastric lesion that could not be resected during the sleeve gastrectomy. Monitoring showed stability in size of the gastric lesion on endoscopic control, hence the decision to perform a surgical exploration with an intraoperative endoscopy before deciding on the nature of the procedure to be performed on the gastric stump. The procedure consisted of an atypical resection of the tumor with satisfactory endoscopic intraoperative control. The patient progressed well postoperatively, discharge on analgesics at day 3 postoperative.

Keywords: Gastrointestinal stromal tumor, abdomen, phenotype, gastric lesion.

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INTRODUCTION

Gastrointestinal stromal tumors are the most common sarcomas of the digestive tract. 85% of mesenchymal tumors of the digestive tract [1].

These tumors can develop in all segments of the digestive tract, from the esophagus to the anus and exceptionally in the mesentery and peritoneum, more often in the stomach and small intestine, 60% according to the medical journal. Swiss [2] the average age is 58 years with a peak between 50 to 70 years with a sex ratio of 1.5 to 2 [1].

They present clinically by digestive hemorrhage in 50% of cases, which may reveal themselves as chronic anemia. Some patients present with symptoms related to an intra-abdominal mass effect and more rarely with metastatic disease [2].

Radiological diagnosis is based mainly on the injected scanner and a Pet-scanner in the event of metastasis [3].

Endoscopic or CT-guided biopsy will be useful for pathological confirmation [3].

CASE PRESENTATION

This is a 59-year-old patient. As a history, the patient underwent femoroiliac patency by placing a prosthesis with long-term anticoagulant treatment which was subsequently discontinued.

Secondary hyperparathyroidism on a single adenoma, operated on with good hormonal control postoperatively.

The discovery of gastric GIST was during the performance of the preoperative endoscopic assessment of morbid obesity (gastro-duodenal fibroscopy) which revealed a small submucosal lesion of 01 cm at the level of the small gastric curvature.

The case was discussed in the multidisciplinary consultation meeting, and the initial therapeutic attitude was to perform a sleeve gastrectomy after an intraoperative gastroscopy.

Intraoperative endoscopic exploration concluded that it was impossible to resect the tumor, given its location on the lesser curvature and the risk of major devascularization. The anatomopathological study of the sleeve gastrectomy part was without anomaly.

Subsequently, gastric endoscopy with biopsy returned in favor of a low-grade GIST. After a multidisciplinary discussion, we decided to operate on the patient under laparoscopy and to perform a gastroscopy at the same time, which will help guide the procedure.

Intraoperative exploration showed a lesion on the posterior surface of the small gastric curvature (Figure 1), sub-serosa of 2 cm, far from the vessels which easily prepare for atypical resection. Intraoperative gastroscopy identified the fundic lesion before stapling with the endo GIA forceps with a green refill flush with the lesion (Figure 2). Endoscopic control was satisfactory, showing good passage of the probe into the duodenum (Figure 3).

The patient left on day 3 postoperative after a good progress. An anatomopathological and immunohistochemical study of the lesion showed a GIST of 0.8 * 0.6 * 0.6 cm at the expense of the muscularis, with healthy margins and a low mitotic index of 2 mitoses per 5 mm², a marking of the proliferation was noted tumor by CD117, moreover the labeling by KI67 was low <1%.

In view of the absence of criteria for a poor prognosis, it was decided to put the patient under surveillance thereafter.



Figure 1



Figure 2

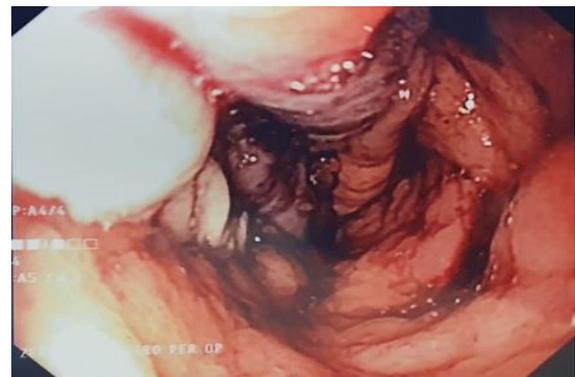


Figure 3

DISCUSSION

These are rare tumors for which diagnostic and therapeutic management must necessarily involve a multidisciplinary team. Most often, they are characterized by a specific c-kit / CD117 + immunohistochemical profile in 95% of cases [4].

The radiological diagnosis is based first of all on the injected CT scan, enteroscan in the event of hail localization, colonoscan with water if it is a colonic lesion, except that for rectal lesions the MRI seems to have more sensitivity [8]. In our case, an injected CT scan and an echoendoscopy were sufficient to make the diagnosis.

Series suggest a high prevalence of small gastric GIST (<10 mm in diameter) in adults after 50 years, the evolution of which is uncertain and may even decline. The risk of malignant development of stomach GISTs seems very low or zero when they are less than 2 cm [3], this is the case with our patient.

Therefore, the choice between monitoring or resection is permissible for GIST of the asymptomatic stomach of less than 2 cm, taking into account the terrain and the location of the lesion in the stomach making its resection simple or complex. In all cases, information and discussion with the patient are necessary. Endoscopic excision of these small gastric GISTs is an option that still needs to be validated in the future.

Monitoring is based on echoendoscopy every 6 months for 2 years and then every 2 years, but which would still need expert advice [3].

Histological analysis seeks to determine the form which is either fusiform (accounting for 70% of cases) as is the case in our patient, or epithelial (20%) and mixed (10%) [5]. The immunohistological study looks for the expression of the markers C-KIT and CD 117 present in 95% of cases [4], CD34 in 70% of cases, H-caldesmone in 80% of cases and DOG.1 + in 98% cases. In our case, we had a strong expression of CD 34 and caldesmone with positivity of DGO 1 and C-KIT.

According to Miettinen's classification [6], the risk of recurrence in our case is very low taking into account the size of the lesion (1 cm), the number of mitoses per field which is low (less than 2) and the gastric location. .

Medical treatment, mainly with imatinib [7] at a dose of 400 mg per day, is reserved for tumors large in size > 5 cm.

Complete single-piece surgical resection of the tumor is the only potentially curative treatment [8, 9]. There is no consensus on the optimal margin for resection, which can probably be limited, the important thing being microscopically complete resection. (R0) on the slices of visceral section. There is no consensus on the optimal margin for resection, which can probably be limited, the important thing being microscopically complete resection (R0) on visceral section slices [10] an intraoperative tumor invasion exposes an increased risk of recurrence, to the point that some teams recommend adjuvant treatment for a fixed period or even for life in this situation [8].

After microscopically incomplete resection (R1), the action to be taken remains the subject of discussions on a case-by-case basis, because on the one hand it has not been demonstrated that a revision improves the prognosis, and on the other hand, this recovery is not always a technically simple gesture [11].

Our treatment consisted of laparoscopic exploration with intraoperative endoscopy. Atypical resection of the lesion was possible after its identification as well as satisfactory gastroscopic control.

In conclusion, a GIST is a tumor that can be benign, but whose malignancy is not to be overlooked, R0 surgical resection remains the rule of treatment which can be accompanied by adjuvant treatment mainly based on imatinib. The prognosis will always depend on the histological analysis.

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