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Jejunal Stromal Tumor Revealed by a Digestive Hemorrhage*

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ABSTRACT

Introduction: Gastro intestinal stromal tumors are rare which can arise at any age, mostly between 50 and 60 years old. They are characterized by the expression on the surface of their cells, a specific gene c-kit. They can be located in any segment of the digestive tract, with a preference for the stomach (60%). The jejunum location is found in 200% to 30% of the cases. The originality of our observation is the revelation of a stromal jejunum tumor by a digestive bleeding. **Case Report:** A 71-year-old man was admitted in emergencies for a low digestive plentiful bleeding with state of hypovolemia shock. **Result:** The operation was performed after stabilization of his dynamic state and blood transfusion and we discovered a jejunal stromal tumor in operation. The follow-up was simple with a good evolution under treatment by Imatinib. **Conclusion:** Stromal digestive tumors are rare which can interest all the segments of the digestive tract and their diagnosis must be often evoked in front of any digestive bleeding.

Keywords: Gastro Intestinal Stromal Tumor; Jejunum Location; Digestive Haemorrhage; Diagnostic and Treatment

1. Background

Digestive stromal tumors are rare that could occur at any age, often between 50 and 60. They are characterized by the expression on the surface of their cells, a specific gene c-kit. They can be located in any segment of the digestive tube, with a preference for the stomach (60%). The Jejunal localization is found in 20% to 30% of the cases [1].

We report a case of a stromal jejunal tumor collaged in the service of surgery in the 5th Military Hospital at Guelmim in Morocco.

2. Case report

A 71-year-old patient, without a particular pathological history, was allowed in emergencies for epigastric distress associated with episodes of bleeding of big abundance. He was in a state of shock with 5 g/1 of haemoglobin. After preparation and transfusion by four globular sediment, an oesogastroduodenal endoscopy was normal and no trace of bleeding was found.

The pelvic abdominal scanner revealed a tissular mass developed over the flexura of a right colon (**Figure 1**).

The exploration by endoscopic video capsula is not yet practised in our training. As the bleeding persist with 6 g/l of haemoglobin, The patient is led to the surgical unit after transfusion and stabilization of his hemodynamic state. The laparotomy showed a colic distension diffused with a lot of blood, there was no tumor at the right colon but we found a tumor situated in 25 cm of the duodeno jejunal angle. The intervention consisted on a segmental jejunal resection and end-to-end anastomosis (**Figures 2** and **3**). There were no postoperative complications in the early postoperative period. We started oral feeding on the second postoperative day with a liquid diet. The patient was discharged home on the forth postoperative day.

Pathological examination of the specimen revealed a GIST originating from the jejunal wall that was composed of fusiform cells. The mitotic index was 1 in 50 higher fields. On immune histochemical examination, CD117 and smooth muscle actin was diffusely positive, S100 was

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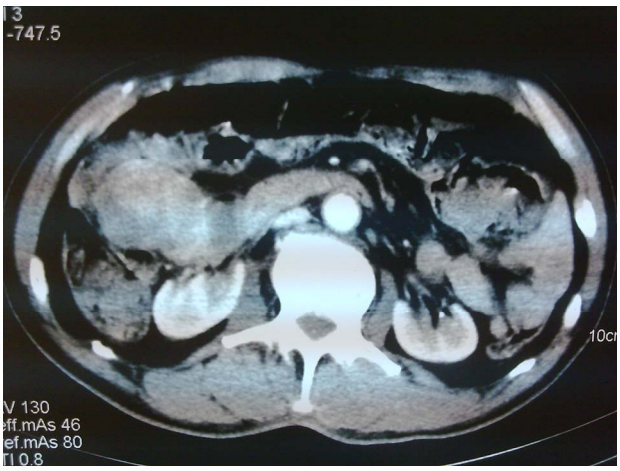

Figure 1. Abdominal scanner showing a tissular tumor of heterogeneous density developed in the right of flexura colon.

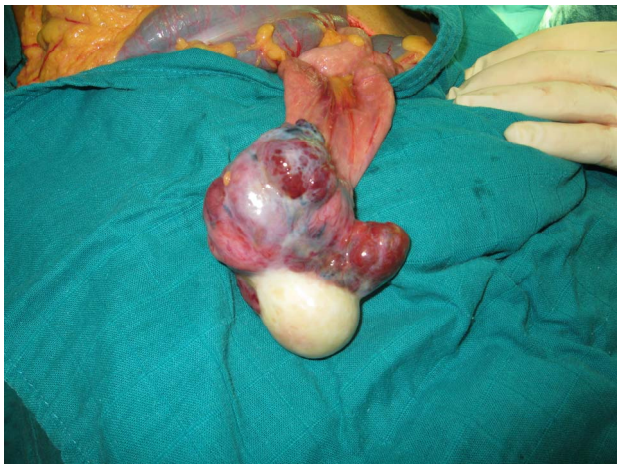

Figure 2. Tumor in expenses of the jejunum.

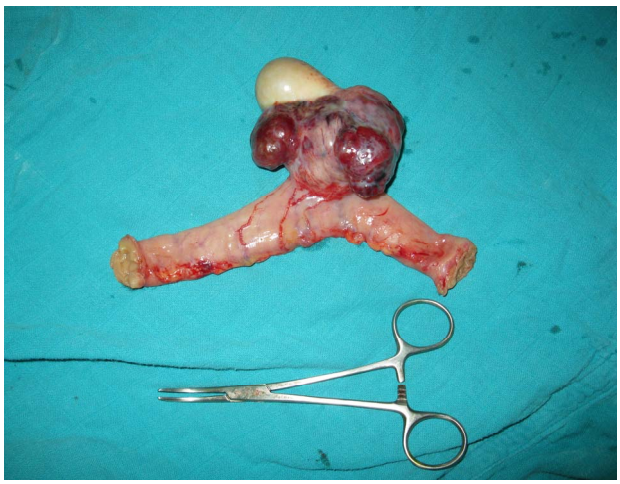

Figure 3. Segmental jejunal resection taking the tumor.

focal positive, and desmin and CD34 were negative. The immune histochemical study confirmed the GIST.

3. Discussion

GISTs are a group of rare tumours of the digestive tract, that could occur at any age, often between 50 and 60 with a sex ratio close to 1 [1,2].The etiologic factors are unknown. They are mostly localized at the level of the stomach (60%), the small intestine (25%) and the colon in (5 to 10%) [3,4]. The incidence of these tumours is about 1–2/100 000[5]. They represent less than 1% of the malignant tumors of the digestive tube, and 20% of the malignant tumors in the small intestine,excluding lymphomas.

The extra digestive forms, the mesenteric ones in particular, are very rare: less than 5% of all the digestive stromal tumors. The stromal tumors of the small intestine can be asymptomatic, of fortuitous discovery in the fall of a morphological examination or during a surgical operation as it was the case of our patient. They can be revealed by a digestive bleeding [1,2,5,6]. The tumors of the small intestine represent the second cause of unexplained digestive bleeding 5 to 10% of the cases after the angiodysplasias [2,7,8].

Immunocytochemically, some tumours show differentiation toward smooth muscle, others toward nerve, some toward histiocytes, a small group toward smooth muscle and nerve, and another small group shows no differentiation [9] (http://www.hindawi.com/crim/oncological.medicine/2011/985242/-B8). The tumor is a major or minor component of certain rare syndromes, familial, and non familial functioning paraganglioma, and GIST are uncommon tumors that occur mostly in a sporadic and isolated form, occasionally as components of multiple neoplasia syndromes, either separately or together. Separately, they occur in several inherited syndromes including multiple endocrine neoplasia [10], the GIST, lentigines, and mast cell tumor syndrome. Together, they are variably prominent components of three syndromes: the familial paraganglioma and gastric GIST syndrome, neurofibromatosis type 1, and the Carney triad (syndrome with paraganglioma-jejunal GIST combination). The two former conditions are inherited as autosomal dominant traits; the later does not appear to be inherited and affects young women predominantly [11].

The endoscopic video capsula plays an important role in the diagnosis of stromal hemorrhagic tumors of the small intestine. It is a simple and harmless examination, that represents at present the examination of first intention in the case of an unexplained digestive haemorrhage after normal oesogastro duodenal endoscopy and an ileo coloscopy [1,2,4,9,10].The endoscopic video capsula made it possible to put the diagnosis of tumors of the small intestine in 8%, 9% of the cases [1,2,9,11,12]. Surgery is the primary treatment of choice and for a long time has been the only effective treatment for GIST with overall 5-year survival rates of 45% - 55% until 2001 when Imatinib, a

small molecule inhibiting the kinase activity of c-kit, was recognized to be highly effective in metastasized GIST and revolutionized the treatment of metastasized and/or unresectable GIST [13,14]. The development of coelio surgery allows an invasive mini curative resection surgery in most cases [7,8,15,16].

4. Conclusion

In the case of an unexplained digestive haemorrhage after normal gastro duodenal endoscopy and an ileo coloscopy, it is necessary to think of the hemorrhagic tumors of the small intestine, especially the stromal tumors. Their diagnosis was clearly improved by the advent of the endoscopic video capsula, which is not yet common practice in our institution.

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