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A case report of gastrointestinal stromal tumor located in the jejunum

Jejunumda bulunan gastrointestinal stromal tümör olgusu

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Abstract

Among rare primary mesenchymal tumors in the digestive tract are gastrointestinal stromal tumors which are often located in the stomach. This tumor is rarely found in the jejunum with an incidence of 20 to 30% of cases. We report the case of a gastrointestinal stromal tumor of the jejunum in a 67-year-old diabetic patient undergoing treatment.

Keywords: Stromal tumors, Jejunum, Surgery, Chemotherapy

Öz

Sindirim sistemindeki nadir görülen primer mezenkimal tümörler genellikle midede bulunan gastrointestinal stromal tümörlerdir. Bu tümör, jejunumda nadiren %20 ila %30 oranında görülür. Bu çalışmada tedaviye dirençli 67 yaşında diyabetik bir hastada jejunumun gastrointestinal stromal tümörü olgusunu sunuyoruz.

Anahtar kelimeler: Stromal tümörler, Jejunum, Cerrahi, Kemoterapi

Introduction

Gastrointestinal Stromal Tumors (GIST) are rare primitive mesenchymal tumors of the gastrointestinal tract [1], characterized by the cell surface expression of a specific gene c-kit (CD117). They can be localized in any segment of the digestive tract, with a predilection for the stomach (60%). The jejunal location of stromal tumors is rare. Its incidence is 20 to 30% of cases [2]. We report a case of a jejunal stromal tumor diagnosed during an abdominal pain syndrome with melena and confirmed by pathological examination in a 67-year-old diabetic patient undergoing treatment.

Case presentation

A 67-year-old diabetic patient under Oral anti diabetic drug presented with diffuse abdominal pain with melena with no other associated symptoms. She complained that these symptoms had begun 10 days prior to her consultation in our department. Oesogastroduodenal fibroscopy was normal. The patient received an abdominal angio-scanner that objectified a tumor process of the first jejunal loop intensely enhanced during the arterial phase suggestive of a stromal tumor. The patient was surgically treated during which an exophytic tumor of about 3 cm was observed at the level of the jejunum precisely about 6 cm from the angle of Treitz (Figure 1). The segment of the jejunum containing this tumor was resected after which we performed a termino-terminal anastomosis.

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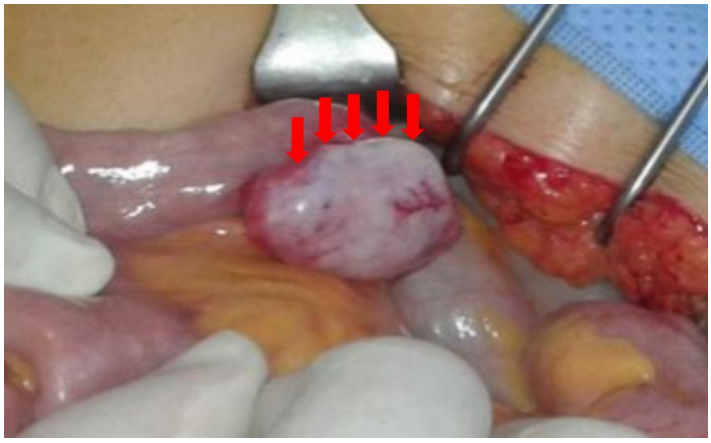

Figure 1: Image showing the tumor

The postoperative course was unremarkable. Pathological examination of the resected specimen confirmed the diagnosis of a high-grade gastrointestinal stromal tumor according to the Miettinen classification. Adjuvant chemotherapy was indicated after the patient's case was discussed in our multidisciplinary staff meeting. The patient was however referred to our oncology department for follow-up care.

Discussion

Gastrointestinal stromal tumors are rare primary mesenchymal tumors of the digestive tract [1]. They can occur at any age, usually between the ages of 50 and 60 years. They are most often localized in the stomach and small intestine but rarely localized in the mesentery and omentum [3]. Jejunal localization of this tumor occurs in 20 to 30% of cases [1].

GIST in the small intestine may be asymptomatic. Diagnosis is established fortuitously during physical examination or surgery. Clinical signs usually occur when they become voluminous or during a complication: digestive hemorrhage, abdominal pain, palpation of a mass [4].

Abdominal computed tomography and magnetic resonance imaging are considered the most appropriate imaging methods for the preoperative diagnosis of GIST [5].

Pathological diagnosis of GIST is based on its typical histological features and on the immuno-histochemical evidence of the two most characteristic markers, CD34 and c-kit protein.

Surgery is the only curative treatment [4]. Complete monoblock surgical resection of the tumor (R0 resection) is the only potentially curative treatment [6,7]. It is essential to avoid per-operative perforation which results in peritoneal dissemination. This places the patient's survival similar to that of patients with incomplete excision in some studies. In case of incomplete excision (R2 resection) or excision of associated peritoneal metastatic nodules, the spontaneous prognosis is poor. The case of R1 resections remains the subject of discussion, as R1 resection has not been shown to be associated with a worse prognosis [6].

The efficacy of chemotherapy in GIST is very low, with 0 to 10% response. Radiotherapy was used only occasionally, with symptomatic aim, for fixed tumors that are responsible for pain or hemorrhage. It is based on Imatinib. There are two situations:

- As neo-adjuvant: indicated

o In the forms that are difficult to resect due to their anatomical localization

o In the forms compromising functional prognosis

o In the forms where surgery poses a significant risk of morbidity

- As adjuvant: indicated in the forms with intermediate and high risk or in case of tumoral rupture

- o It is based on Imatinib. The optimal duration of Imatinib treatment is still being evaluated.
- o For intermediate and high risk forms, the recommended treatment time is at least 3 years.
- o In case of tumor rupture, long-term treatment is recommended [8].

Imatinib may also be used to try to reduce the size of the tumor and thus allow it to be removed through surgery.

After excision, late recurrences of tumors with reduced malignancy potential are possible.

Conclusion

Gastrointestinal stromal tumors of the jejunum are rare. They have various clinical manifestations. Surgery remains the only curative treatment for this disease.

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