Gastrointestinal-stromal tumour revealed by traumatic rupture

Rupture post-traumatique d’une tumeur stromale gastro-intestinale

Gastric-stromal tumours (GST) are uncommon and represent less than 5% of gastric neoplasms. However, the gastric localisation of gastrointestinal-stromal tumours (GIST) is about 50% [1]. Clinical features are not specific and GIST revealed by traumatic abdominal bleeding is rare. We report a case of GST revealed following upper left-abdominal quadrant trauma and analyse the management and prognosis of ruptured GISTs.

A 58-year-old man was admitted to emergency after upper left-abdominal trauma. At presentation, the blood pressure was 90/50 mmHg and cardiac rhythm 110 per minute. Computed tomography showed a heterogeneous gastric tumour at the fundus (140 mm diameter) and significant-abdominal haemorrhage (Fig. 1). Spleen haemorrhage due to trauma or tumoral bleeding was suspected. At surgery, a gastric tumor was identified, which had ruptured from trauma causing the bleeding. Bleeding stopped spontaneously before surgery. The spleen was safe and no nodal involvement was found. A wedge resection was performed with successful recovery. Pathological tests confirmed epithelioid and spindle-cell proliferation, mitotic count 15/50 high-power field (HPF). The tumour was positive for CD117 and CD34 on immunohistochemistry, confirming the suspected diagnosis of GIST, but negative for desmin and smooth-muscle actin. Surgical resection was considered by the surgical procedure and pathology to be a complete-tumour resection. No liver metastases were identified during or after surgery. However, multiple local recurrences occurred twice, three months and nine months after the first intervention. Recurrences involved the spleen, gastrospenic ligament and the greater omentum. During the second operation, a splenectomy was necessary. Finally, because of rupture and probable tumour-cell dissemination, 400 mg imatinib therapy was indicated. Imatinib was well tolerated for three years with no disease progression. Disease progression was observed at 42 months (Fig. 2). In January 2008, 45 months later, the patient is still alive and is being treated with sunitinib.

The clinical features of GIST are similar to those of other gastric neoplasms. A tumour mass, discovered during a clinical examination, is correlated with a high malignancy. Spontaneous or post-traumatic rupture is rare. Individual cases of tumor rupture have been described in the literature [2—4], but none with such long outcomes. Since the reclassification of GIST, only a few cases of rupture in the peritoneal cavity have been reported [5]. This case reports the rupture of GST due to direct trauma in the upper-left abdomen. Trauma causes disruption of the gastric tumour. In this case, the management and evaluation of the prognosis was difficult. Surgery is the gold standard treatment for localised GIST. A complete resection avoiding tumor rupture and obtaining negative margins must be performed. Wedge resection of the stomach or segmental resection of the intestine is considered adequate treatment [6]. We felt that there was no indication for total gastrectomy during first surgery, because rupture of the tumour had certainly diffused GIST cells in the peritoneum.

Although imatinib was only prescribed later, when the patient was diagnosed in 2003, the consensus for management with imatinib had not been established. This prescription certainly helped to stabilize the disease for 36 months. Imatinib was well tolerated for three years with no disease progression. In January 2008, 45 months later, the patient is still alive, but disease progression was observed suggesting imatinib resistance. As a result, sunitinib has been begun.

Although the discovery of oncogenic-kinase mutations and the introduction of specific molecular therapies may improve the prognosis, a ruptured tumour transforms a localised and encapsulated GIST into a peritoneal cancer. Our case and those in the literature confirm that recurrence is frequent in GIST and long-term outcome is only reported in patients who have received an imatinib protocol. Rupture of GIST in the peritoneal cavity must be included as a significant prognostic factor.
CT at admission showing abdominal bleeding.  
Scanner à l'admission, montrant un hémopéritoine.

CT after 42 months imatinib therapy with disease progression.  
Scanner après 42 mois de traitement par l'imatinib montrant la progression tumorale.

References


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L’abcès était une GIST

The abscess was a GIST

Les gastrointestinal stromal tumor (GIST) sont des tumeurs mésenchymateuses développées aux dépens des tissus conjonctifs de la paroi des organes du tube digestif [1]. Il s’agit fréquemment de tumeurs peu symptomatiques, bien que souvent volumineuses. La taille de la nécrose centrale est très variable et peut atteindre des tailles importantes : on parle alors de GIST à présentation cystique [2–4]. Ces tumeurs peuvent se révéler à travers de nombreuses manifestations cliniques, parfois trompeuses. Nous rapportons le cas d’un patient porteur d’une GIST dont la nécrose centrale s’était surinfectée, mimant la présentation clinique, biologique et iconographique d’un abcès intrapéritonéal.

Un homme de 46 ans, polynésien, aux seuls antécédents notables d’angor de Printzmetal traité par Monotildiem et Kadergic et de tabagisme sevré depuis deux ans, s’était présenté aux urgences pour des douleurs abdominales de siège épigastrique associées à une diarrhée et à une fièvre.

À l’examen clinique, on retrouvait une hémodynamic conservée, une polypnée à 30 par minute, des crépitants en base gauche. L’abdomen était tendu, sans masse palpée, sans trouble du transit. Il existait un syndrome inflammatory biologique marqué.