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CLINICAL CASE

Extra-gastrointestinal stromal tumour. Report of primary tumour in the omentum

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KEYWORDS
Extra-gastrointestinal stromal tumour (E-GIST);
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Abstract Gastrointestinal stromal tumours (GISTs) are the most common mesenchymal tumour in the gastrointestinal tract. More than half of these originate in the stomach, the rest in the small intestine, colon, rectum and oesophagus, and rarely in the omentum.
Case report: A 48-year-old woman, with painful abdominal growth developing over two years. Radiological studies showed a heterogeneous solid lesion in the pelvis, so she underwent surgery and the omentum was resected, no evidence of a tumour was found in the gastrointestinal tract. The omentum measured 50 cm × 30 cm × 15 cm. Its surface was heterogeneous and showed multiple nodules of varying sizes. A microscopically diffuse pattern of spindle cells was observed, some of them epithelioid, with three mitoses in 50 high-power fields. The immunohistochemical study is positive for CD117 and DOG-1.

E-GIST should be considered for the differential diagnosis of patients with multinodular lesions in the omentum and mesentery.

PALABRAS CLAVE
Tumor del estroma extra-gastrointestinal (E-GIST);
GIST;
Epiplón

Tumor del estroma extra-gastrointestinal. Informe de un caso de tumor primario en epiplón

Resumen El tumor del estroma gastrointestinal (GIST) es el tumor mesenquimatoso más frecuente del tubo digestivo. Más de la mitad de estos se originan en estómago, el resto en intestino delgado, colon, recto y esófago; excepcionalmente en epiplón.

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Caso clínico: Mujer de 48 años con crecimiento doloroso abdominal de 2 años de evolución. Los estudios radiológicos mostraron una lesión sólida heterogénea en pelvis, por lo que fue intervenida quirúrgicamente y se resecó epiplón, no se encontró evidencia de tumor en el tracto gastrointestinal. El epiplón midió 50 × 30 × 15 cm. Su superficie es heterogénea, presenta múltiples nódulos de diferentes tamaños. Microscópicamente se observa un patrón difuso de células fusiformes, algunas de ellas epitelioides con 3 mitosis en 50 campos de alta resolución. El estudio de inmunohistoquímica es positivo para CD117 y DOG-1.

El E-GIST, se debe considerar en el diagnóstico diferencial de pacientes con lesiones multinodulares en epiplón y mesenterio.

Introduction

Gastrointestinal stromal tumours (GISTs) are the most common primary mesenchymal tumour in the gastrointestinal tract, with an incidence of 11–15 people per every 100,000. They account for 1% of gastrointestinal neoplasms, and most present in adults and in men,[2] but there are cases reported in children.[3] Most of the reported E-GIST cases are described in elderly patients.[4–6]

More than 50% of GISTs are found in the stomach, 25–30% in the small intestine (jejunum and ileum), 5% in the colon and rectum, and 1% in the oesophagus. Cases have been reported in the mesentery and omentum,[1,2] as well as in other organs, such as the pancreas,[7] uterus[8] and vaginal wall.[9] They originate from the interstitial cells of Cajal and present mutations in the c-KIT genes and platelet-derived growth factor receptor (PDGFRA) which leads to tyrosine kinase activation.[10] The clinical presentation of these tumours depends on their location and size; however, in advanced stages, they occur with abdominal pain, ileus, bleeding, anaemia and weight loss.[7]

The importance of this case of primary E-GIST in the omentum involves its location and unusual presentation, since there are few cases reported in the literature; thus there is no reported incidence.

Case report

A 48-year-old woman who was admitted to the Oncology Department of the Hospital General de México, with symptoms starting two years prior characterised by repeated urinary tract infections, treated with antibiotics and analgesics with little response. An increase in her waist circumference occurred later on with colic-like pain predominantly in both iliac fossae, which did not ease when analgesics were administered, accompanied by episodes of fever, with no weight loss. No signs of intestinal occlusion or any other gastrointestinal symptoms were reported. A well defined, mobile tumour in the pelvis was palpated during a physical examination, located up to 3 cm above the navel, which was impossible to rule out on palpation to examine the rest of the abdominal/pelvic organs. Therefore, a clinical diagnosis of ovarian cancer was established. Serum tumours markers were negative, and a computerised tomography scan showed a solid, heterogeneous lesion in the pelvis, which was multi-lobulated with cystic degeneration and calcifications measuring 17 cm × 12 cm × 6 cm with 636 cubic cm of fluid. There was also mesenteric lymph node growth. The omentum that was surgically resected was described as a ''cluster of grapes'' with implants with the same characteristics in the surface of the mesocolon, uterine surface, both ovary surfaces and uterine tubes. In the gastrointestinal tract, only an ileal occlusion was reported due to a superficial tumour implant, thus the superficial ileum implant and the rest of the implants were surgically resected and sent to the Surgical Pathology department for pathological study along with the omentum.

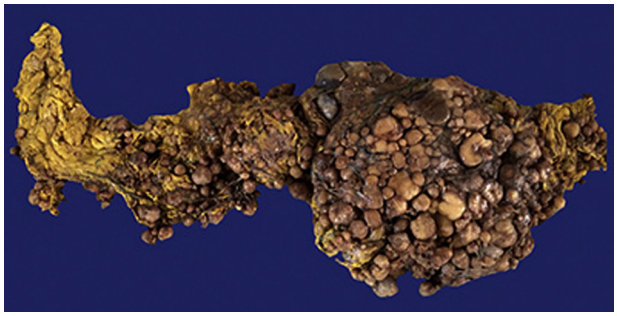

Figure 1 Omental tumour (external surface). Size: 50 cm × 30 cm × 15 cm. 3.5 kg.

In the surgery, the liver and stomach did not show any macroscopic abnormalities in their morphologies, nor any superficial implants in the omentum tumour. As mentioned above, the established clinical diagnosis was undifferentiated omentum carcinoma. It is important to mention that, in the imaging studies and during the surgery, no evidence was found of a tumour in the gastrointestinal tract.

The Surgical Pathology department received the omentum (Fig. 1), which measured 50 cm × 30 cm × 15 cm and weight 3,500 g. Its exterior surface presented multiple, well-defined nodules measuring from 1 to 15 cm on the major axis that were light yellow in colour. On the slice surface, most of the nodules were solid, some with necrosis and haemorrhage, and one was cystic with blood inside (Fig. 2). Implants with the same characteristics were found on the

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