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CASE PRESENTATION

Giant liver hemangioma. About a case

Hemangioma Hepático Gigante. A propósito de un caso

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ABSTRACT

Introduction: Giant hepatic hemangiomas are usually less common than those measuring less than 5 cm. Giant hemangiomas can cause symptoms and present a higher risk of complications, such as traumatic rupture, so their management can be complex as there is currently no consensus on their treatment.

Objective: To describe the case of a patient with a giant hemangioma with a presentation of intense and disabling epigastric pain.

Case presentation: A 55-year-old female patient presented with epigastric pain associated with vomiting after eating, dark urine, and difficulty defecating. Imaging studies revealed a tumor in the left hepatic lobe consistent with a giant hemangioma, which displaced the head and body of the pancreas posteriorly.

Conclusions: Benign vascular liver tumors are mildly aggressive, very slow-growing, and mostly asymptomatic. However, giant and extremely giant hepatic hemangiomas can cause symptoms, ranging from diffuse, mild, and nonspecific pain to consumptive coagulopathy.

Keywords: Abdominal pain; Hepatic hemangioma; Abdominal tumor

RESUMEN

Introducción: el hemangioma hepático gigante suele ser menos frecuente que los que miden menos de 5 cm, los hemangiomas gigantes pueden causar síntomas y presentar mayor riesgo de complicaciones, como la ruptura traumática, por lo que su manejo puede ser complejo ya que actualmente no existe consenso para su tratamiento.

Objetivo: describir el caso de una paciente con hemangioma gigante con forma de presentación de dolor epigástrico intenso e incapacitante.

Presentación de caso: paciente femenina, de 55 años de edad, que consultó por presentar dolor en epigastrio asociado a vómitos tras la ingestión de alimentos, coluria y dificultad para defecar. En los estudios imagenológicos realizados se constató un tumor en lóbulo hepático izquierdo compatible con hemangioma gigante, que desplazaba hacia atrás cabeza y cuerpo del páncreas.

Conclusiones: los tumores benignos vasculares de hígado son de curso poco agresivo, de muy lento crecimiento y en su mayoría asintomáticos. Sin embargo, los hemangiomas hepáticos gigantes y extremadamente gigantes pueden llegar a generar síntomas, los cuales varían desde dolor difuso, leve e inespecífico, hasta coagulopatía de consumo

Palabras clave: Dolor abdominal; Hemangioma hepático; Tumor abdominal

INTRODUCTION

Hepatic hemangioma (HH), also referred to as cavernous hemangioma due to the histologically observed cavernous vascular spaces, is one of the most common benign mesenchymal tumors of the liver. [1] Hemangiomas are typically solitary lesions that can occur in both liver lobes, though they are more frequently found in the right lobe. Their size can range from a few millimeters to over 20 cm, with most being small (<5 cm). Those exceeding 5 cm in size are classified as giant hemangiomas. [1,2,3]

Histologically, HH is composed of vascular channels lined by mature endothelial cells, surrounded by a loose hepatic stroma with connective tissue. [3,4] Complications are rare but may include hemoperitoneum due to spontaneous or traumatic rupture, recurrent tumor thrombosis, cystic degeneration, and superior vena cava thrombosis caused by compression. Large hemangiomas (>10 cm) carry a risk of rupture into the peritoneal cavity and may lead to consumptive coagulopathy. [4]

Most hepatic hemangiomas are asymptomatic and are incidentally detected during imaging studies. [2,3,4] However, larger hemangiomas can compress adjacent organs, leading to symptoms such as pain, fever, or organ dysfunction. The most accurate diagnostic tool is MRI, although ultrasound or dynamic computed tomography can also be useful. Surgical intervention is recommended for symptomatic giant hemangiomas, typically those larger than 15 cm, to prevent complications. Treatment options include hemangioma resection, liver transplantation in cases of diffuse and unresectable disease, or arterial embolization when surgery is not feasible. [4,5]

Based on the above, the authors' objective is to present a case of a giant hemangioma manifesting with severe and debilitating epigastric pain.

CASE PRESENTATION

We present the case of a 55-year-old woman from an urban area with a history of hysterectomy and appendectomy, and a family history of high blood pressure and type 2 diabetes mellitus. The patient sought medical attention due to intense and debilitating abdominal pain located in the epigastrium, with an intensity of 6/10 on the visual analog scale. This pain, which did not radiate to other regions, had persisted for three years and did not respond to common analgesics such as paracetamol or dipyrone. The pain was also associated with vomiting after eating, dark urine, and difficulty defecating.

Highlight the physical examination:

Abdomen: Asymmetrical, with increased volume observed at the expense of the right hemiabdomen. A surgical scar from the appendectomy and hysterectomy was observed in the right iliac fossa and hypogastrium. A painful mass was palpated in the right hypochondrium, encompassing the epigastrium, mesogastrium, and part of the left hypochondrium.

Based on the above, the patient was admitted. During her stay, the following additional tests were performed:

Hct: 0.41%. Erythrocyte sedimentation rate: 8 mm. Leukogram: (10.4x109, Polymorphonuclear cells: 0.5, Monocytes: 0.01, Lymphocytes: 0.46). Peripheral Stent: (Normocytic normochromic red blood cells, adequate platelets, adequate leukocytes with a predominance of neutrophils). Coagulogram: (Bleeding time: 1', Clotting time: 8', Retractable clot). Platelets: 178 x 109/L. PT: C 15, P 17. Blood glucose: 5.0 mmol/L. Creatinine: 82 mmol/L. Uric acid: 226 mmol/L. SGPT: 16 U/L. SGOT: 21 U/L. GGT: 39 U/L. Alkaline phosphatase: 238 U/L

Abdominal ultrasound: Enlarged liver at the expense of the left lobe, complex image measuring 120 x 70 mm in the left lobe of the liver with irregular contours. The rest of the intra-abdominal structures were unremarkable.

A plain CT scan of the thoracoabdomen with contrast-enhanced 5-mm sections was performed. No pleuropulmonary abnormalities were observed. The liver lobe was homogeneous upon injection of the contrast agent. The left lobe showed an occupying process of variable densities, with thick walls, contrast enhancement, and a central hypodensity measuring 152.41 x 97.47 mm. This image displaced the head and body of the pancreas posteriorly. The pancreas was homogeneous and posteriorly rejected as described above. The gallbladder was acalculous and thin-walled. The bladder had regular contours,

acalculous, and thin walls. The diagnostic impression was a cavernous hemangioma of the liver.

After the complementary studies were performed, analyzed, and discussed by the medical team, the decision was made to perform surgery. Following this procedure, the patient has shown favorable clinical progress.

Surgical procedure: Left hepatic lobectomy.

A biopsy was performed, revealing: Cavernous hemangioma of the liver.

DISCUSSION

The treatment of HH depends primarily on its size, the number of lesions, the presence or absence of symptoms, and the age of onset. In most studies, surgical treatment for symptom-free HH smaller than 5 cm is controversial, as very few tumors in these patients have been found to grow and develop complications.

On the other hand, rapid growth has been reported in some hemangiomas, especially in lesions >5 cm, particularly those with a subcapsular location.

Some studies report that [2,3,5] regardless of size and the absence of symptoms, the risk of bleeding is too low to justify prophylactic resection. It is important that all other causes of pain be evaluated and excluded before surgery, as some studies have reported that 25 % of patients had persistent symptoms after surgical resection. [6]

2 % of diagnosed HHs undergo surgery. The most common indications for surgery are the development of complications such as rupture and intraperitoneal bleeding, which have a mortality rate of 20 % in large hemangiomas. Resection, enucleation, hepatic artery ligation, or liver transplantation are performed. [1]

Mortality from surgical resection is negligible in centers specializing in hepatobiliary pathologies. However, some techniques cause significant blood loss and may require transfusions. Other authors advocate nonsurgical techniques, although their use is limited in the case of giant hemangiomas. These include hepatic artery embolization, radiotherapy, and interferon alpha-2a. [7]

The combination of chemoembolization and surgical resection is currently rarely used; its use is limited to giant HHs, with a high risk of bleeding, especially in patients with blood dyscrasias. Arterial embolization alone has been used to control acute bleeding and symptoms in large hemangiomas, but it can be complicated by abscess formation, and there is no evidence of long-term efficacy. The combined use of hepatic artery chemoembolization and subsequent surgical resection remains a valid treatment option in patients with giant hepatic hemangiomas in an accessible location, such as the case in question. [6,7]

The case presented contributes to the discussion on the management of giant hepatic hemangiomas, a topic that still lacks consensus in the medical literature. It can serve as a basis for future studies comparing different therapeutic approaches (surgical vs. nonsurgical). It reinforces the importance of monitoring and treating giant hemangiomas due to their potential to cause serious complications, such as rupture or consumptive coagulopathy, which may be of interest to researchers studying the complications of liver tumors.

CONCLUSIONS

Benign vascular hepatic tumors typically have a mild, slow-growing course and are asymptomatic in most cases. However, giant and extremely giant hepatic hemangiomas can cause symptoms, ranging from diffuse, mild, and nonspecific pain to consumptive coagulopathy. In this case, surgical management of the giant hepatic hemangioma was successful, without preoperative interventional radiology, demonstrating that it is a safe option in expert hands.

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CONFLICT OF INTERESTS

The authors have no conflicts of interest to declare.

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