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**Case Report** 

# Atypical Hepatic Hemangioma: A Surgical Surprise

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### Abstract

Hepatic hemangioma is the most common benign hepatic tumor. Ultrasound is sufficient for diagnosis. Otherwise, magnetic resonance imaging is necessary. Surgical resection is indicated only in the rare case of complications or disabling functional impairment. We report the case of a hepatic hemangioma initially diagnosed as a gastrointestinal stromal tumor of the stomach, in which surgical resection allowed the disappearance of the painful epigastric symptomatology.

Keywords: Hepatic hemangioma, surgical managment.

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## **INTRODUCTION**

Among the benign hepatic tumors, cavernous hemangioma is the most common [1]. This solid hepatic tumor is due to intrahepatic vascular malformations in which the blood circulates slowly. Three complications are possible: severe consumption thrombocytopenia (Kasabach-Merritt syndrome), Bormann syndrome (fever, pain, biological inflammatory syndrome), and spontaneous rupture, which is extremely rare [2]. Without atypia, ultrasound is sufficient for diagnosis [3]. Surgical resection is indicated only in the case of Kasabach-Merritt syndrome, Bornmann syndrome, rupture, or major functional impairment [2]. We report the case of a patient with a hepatic hemangioma mimicking a gastrointestinal stromal tumor of the stomach.

## **CASE REPORT**

A 75-year-old patient presented to our hospital for intermittent epigastric pain. Her history includes surgery for an ovarian cyst 10 years ago, and surgery for a skin tumor 6 years ago. The clinical examination was normal. Endoscopy showed petechial erythematous antrofundal gastritis and erythematous bulbitis. Antral and fundal biopsies revealed no abnormalities. An abdominal CT scan showed an inter-hepato-gastric tumor mass that seems to be at the expense of the greater gastric curvature (Figure 1). A gastrointestinal stromal tumor of the stomach was then suspected, and the patient was taken to the operating room for exploration via a midline laparotomy. On surgical exploration, we found a hepatic hemangioma located in the lateral superior area of the left lobe of the liver (figure 2). This hepatic mass measured about 4 cm, and there was no mass at the expense of the greater gastric curvature, contrary to what the abdominal CT scan suspected. We decided to perform a hepatectomy removing the mass in one piece given the patient's symptoms and the size of the tumor (figure 3). Our patient made an uneventful post-operative recovery. She was discharged from the hospital in stable conditions on the fifth post-operative dav. Histopathology confirmed that it was a cavernous hemangioma. Concerning the follow-up, we noted the disappearance of the painful epigastric symptomatology.

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Figure 1 : CT scan of the abdomen showing an inter-hepato-gastric mass



Figure 2: (a)Intra operative photo showing the hepatic hemangioma at the expense of the left lobe of the liver. (b) The hepatic hemangioma is located in the lateral superior area of the left lobe



Figure 3: Hepatic hemangioma removed from the left lobe of the liver

## **DISCUSSION**

Hepatic hemangiomas are well-defined lesions, generally less than 3 cm, even if giant angiomas of size greater than 10 cm have also been reported exceptionally in the literature [4]. The prevalence of hepatic angiomas in the general population varies between 0.4 and 20%, depending on the series [5]. This tumor is more common in women than men, fortuitously discovered, and exceptionally symptomatic: pain on exertion, a sensation of mass, and/or compression of a neighboring organ [5]. Three complications are possible: severe consumption

(Kasabach-Merritt thrombocytopenia syndrome), Bormann syndrome (fever, pain, biological inflammatory syndrome), and spontaneous rupture, which is extremely rare [2]. Ultrasound is sufficient for diagnosis in the absence of atypia [3]. It shows a hyperechoic, homogeneous, well-defined, lobulated lesion with posterior enhancement. Sometimes, ultrasound is insufficient to diagnose hepatic hemangioma, and imaging with a contrast product is necessary. In this case, magnetic resonance imaging (MRI) is the gold standard. On MRI, the hemangioma is hypointense on T1 and very hyperintense on T2 [3].

Hepatic angioma is most often asymptomatic and exceptionally leads to complications. That's why therapeutic abstention is the rule, and monitoring is not necessary [3]. Surgical resection is indicated only in the case of complications, or major functional impairment [2]. As for our patient, who complained of annoying epigastric pain, the surgical discovery of an accessible lesion of almost 5 cm indicated a surgical resection.

### **CONCLUSION**

Hepatic hemangioma is more common in women than men. A therapeutic indication is the presence of symptoms or complications. For surgical management, we can propose anatomic resection or enucleation. The choice will depend on factors such as the location, size, and the lesion's morphology.

#### CONSENT

Written informed consent was obtained from the patient for publication of this case report and any accompanying images.

#### **COMPETING INTERESTS**

All authors declare no competing interest.

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