

# **RESEARCH ARTICLE**

### A LARGE HEPATIC HEMANGIOMA REVEALED BY EPIGASTRIC PAIN

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Manuscript Info	Abstract
Manuscript History Received: 05 April 2022 Final Accepted: 08 May 2022 Published: June 2022 Key words:- Hepatic Hemangioma, CT scan, Surgery	Hepatic hemangiomas are the most common benign tumors of the liver and are often asymptomatic, diagnosed incidentally. They are considered giant when they exceed 5 cm at their largest diameter. Giant hepatic hemangiomas are rare. Diagnosis is essentially based on imaging (CT, MRI). Spontaneous or traumatic rupture, intratumor hemorrhage, rapid growth, diagnostic uncertainty and coagulopathy are the main indications for surgery. We present the case of a 53-year-old woman with two hepatic hemangiomas, the largest of which occupies the entire left lobe and measures 17 cm in diameter. It is not known how long the tumor had been growing. She underwent surgical management due to obvious mass effect.

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#### **Introduction:-**

Hemangioma is the most common benign liver tumor with a prevalence of 2 to 4% in adults [1,2]. It is much more common in women than in men, with a sex ratio of 5/1 [3]. It is most often small (< 3 cm), but can be large, exceeding 10 cm. In the majority of cases, the hemangioma is asymptomatic and discovered fortuitously during, in particular, an ultrasound [4]. The giant angioma (more than 4 cm) becomes symptomatic and requires surgical treatment [5]. We report the case of a 53-year-old woman presenting with a giant hemangioma of the liver revealed by epigastric pain.

#### **Observation:-**

A 53-year-old woman, with no particular history, consulted for progressively onset epigastralgia, of the type of heaviness with posterior irradiation and unrelated to food. The general condition was marked by anorexia and progressive weight loss without jaundice or signs of hepatocellular insufficiency or collateral venous circulation. On clinical examination, there was a large epigastric mass mobile on respiration with slight tenderness on palpation. There had been no ascites or edema of the lower limbs. The lymph node areas were free. Pelvic examinations were normal. Biological assessment showed anemia at 9.6 g/dl of hemoglobin, normochromic normocyte, thrombocytopenia at 128,000 platelets/mm3. CRP was normal. The rest of the biological assessment including liver function and tumor markers was normal. Abdominal ultrasound showed a large heterogeneous liver with the presence of two hypo- and hyperechoic images, one of which occupies almost the entire left lobe. The portal vein and spleen were normal. There had been no ascites. The scanner objectified the presence at the expense of the left liver of a voluminous roughly oval mass, with lobulated contours, with exophytic development, iso dense site of necrosis zones, enhanced in the periphery and in a progressive way until the late stage, measuring 170x110 mm extended to 160 mm. She pushes her stomach back. This is associated with the presence of a range straddling segments IV and VIII, with the same enhancement kinetics measuring: 64x44 mm extended over 47 mm. (Figure I)

It was decided to perform a liver MRI which showed two liver lesions compatible with hepatic angiomas, the largest of which occupies almost the entire left lobe and measures 175x105mm. (Figure II)

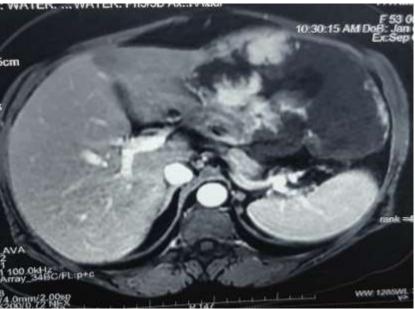


Figure 1:- CT image showing a liver mass that occupies the left lobe and pushes the stomach.

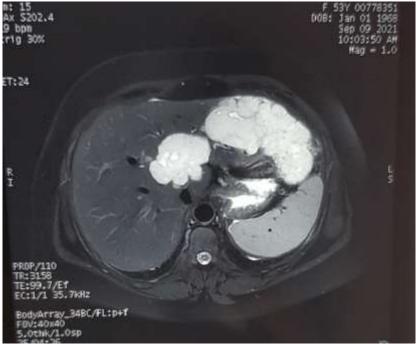


Figure 2:- MRI of two hepatic angiomas, the largest of which occupies almost the entire left lobe.

Because of this typical aspect of hepatic angiomatosis with symptomatic giant hemangioma and the risk of rupture, surgical excision was decided without preoperative biopsy. The patient was operated on in September 2021. Through a large right subcostal incision. Surgical exploration found a large hepatic angioma occupying the entire left lobe and extending to segment IV and part of segment I. A left hepatic lobectomy extended to part of segment IV was performed (Figure III) without any incident intraoperative; blood loss was estimated at about 150 ml. Histological examination of the surgical specimen concluded with a giant cavernous angioma with sometimes thrombosed vascular cavities and areas of ischemic necrosis. The postoperative period is was uneventful and the

patient was discharged home on the fifth postoperative day. 7 months after the operation, the patient is alive without any recurrence on liver MRI.



**Picture 3:-** Appearance of the operative part (anterior and posterior face).

#### **Discussion:-**

Giant liver hemangiomas account for approximately 20% of hepatic angiomas and are defined as lesions larger than 4 cm in diameter [6, 7]. Complications are rare, the most common are mechanical. It can be intratumoral or intraperitoneal hemorrhage by spontaneous or traumatic rupture, compression of the intrahepatic bile ducts, the portal vein, the vena cava or the stomach [1]. Our patient presented with a voluminous epigastric mass which pushes the stomach back giving epigastralgia. Several studies have shown an increase in lesion size during pregnancy or during estrogen hormone therapy, suggesting a causal role. The hemangioma in our case gradually increased in volume. This increase was neither related to pregnancy nor to estrogen intake. On the blood count, our patient presented with a normochromic normocytic retained anemia at 9.6 g/dl, thrombocytopenia at 128,000/mm3 without leukocyte disorder and a prothrombin level within the norms. Fibrinogen was not measured in our patient. A lower figure would have allowed us to evoke the Kasabach-Merritt syndrome [7] complicating the giant haemangioma. Kasabach-Merritt syndrome (intravascular coagulation localized at the level of the hemangioma) is exceptionally observed in adults and can be fatal in 20 to 30% of cases [7]. The radiological diagnosis of giant hemangioma of the liver is based on ultrasound, computed tomography and magnetic resonance imaging. The first two characterize the lesion on the morphological level and the last makes it possible to search for intra-tumoral thrombosis, hemorrhage or fibrosis. On ultrasound, the hemangioma appears as a hyperechoic, homogeneous lesion without a collar with a size normally less than 3 cm in diameter. [8,9] Our patient presented two hypo- and hyperechoic images, one of which occupies almost the entire left lobe, which required additional examinations to confirm the diagnosis, including CT and MRI. MRI remains the examination of choice for diagnosing hepatic hemangioma [10]. When it is not available, CT can be requested, its sensitivity exceeds 80% [10]. The diagnostic criteria for angioma on CT scan are hypodensity on sections without injection. After intravenous administration of the contrast product, there is early peripheral contrast uptake with "lump" enhancement of the lesion. During the portal phases, the CT scan shows progressive opacification from the periphery towards the center of the lesion with a late filling of 3 to 60 min after injection of the contrast product, persisting on the images in the late phase [7,8,9]. In our patient, CT angiography revealed the characteristics of a liver angioma and was the key element in establishing the diagnosis of giant hemangioma. The enhancement semiology in MRI is identical to that of the scanner, but with a higher resolution [9]. MRI has a sensitivity of 90%, a specificity of 92% and a diagnostic performance of 90% for the diagnosis of angioma [2]. In our context, MRI confirmed the diagnosis of hepatic angioma. Surgical treatment of hepatic hemangiomas is reserved for cases of giant or symptomatic lesions, uncertain diagnosis, lesions with complications and rapidly growing lesions, it is systematically indicated in cases of stalked hemangiomas because of their tendency to torsion and at the breakup. Many studies report that size is not the absolute criterion for surgical treatment of hemangioma. Giant hemangiomas are usually silent, have no symptoms, and are recognized incidentally.[11] In case of asymptomatic angioma, no treatment should be offered [12]. When due to its volume, the tumor is responsible for

pain or complications by compression of adjacent structures, by intratumoral bleeding or by spontaneous rupture, and when the diagnostic means do not confirm the benign nature of the lesion, treatment is necessary [12–13]. More rarely, consumption coagulopathy (Kasabach-Merritt syndrome), resulting from the sequestration and destruction of platelets linked to giant hemangiomas, can be seen and is an absolute indication for treatment. In our patient, surgical excision was decided because of epigastric pain and a high risk of spontaneous or post-traumatic rupture. resulting from platelet sequestration and destruction related to giant hemangiomas, can be seen and is an absolute indication for treatment. In our patient, surgical excision was decided because of epigastric pain and a high risk of spontaneous or post-traumatic rupture. In our patient, surgical excision was decided because of epigastric pain and a high risk of spontaneous or post-traumatic rupture. resulting from platelet sequestration rupture. In our patient, surgical excision was decided because of epigastric pain and a high risk of spontaneous or post-traumatic rupture. In our patient, surgical excision was decided because of epigastric pain and a high risk of spontaneous or post-traumatic rupture. In our patient, surgical excision was decided because of epigastric pain and a high risk of spontaneous or post-traumatic rupture.

## **Conclusion:-**

In conclusion, even large hepatic hemangiomas remain asymptomatic. They are usually discovered incidentally. An abdominal trauma can be their mode of revelation. The scanner with its different times makes it possible to make the diagnosis with certainty. We report in this article the case of a giant hemangioma successfully treated by surgical resection. We suggest that some patients with giant hemangioma should undergo surgical treatment even if they have no complaints. Not only the symptoms, but also the size and the risk of rupture by trauma must be taken into account in these cases.

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