



## Giant Cavernous Hemangioma of Liver: A Case Report

### KEYWORDS

Giant cavernous hemangioma, Liver

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**ABSTRACT** Most hepatic hemangioma are small and symptomless. Hemangiomas can occasionally grow to large size and produce symptoms. Here, in we report a case of giant cavernous hemangioma in 48 year old female patient presented with abdominal mass simulating abdominal tumor and was managed surgically. Diagnosis was confirmed on radiological and histopathological features. To our best knowledge, very few cases of giant cavernous hemangioma have been reported from India.

### Introduction

Hepatic Hemangiomas is the most common benign liver tumor, occurring in up to 7 % of normal adult population, although one prospective study identified hemangiomas in 20 % of liver autopsy specimens.<sup>[1]</sup> A wait-and-see approach is justified in patients without symptoms or with minimal symptoms, even in the presence of a giant haemangioma. Surgical resection of a giant haemangioma is only necessary when the preoperative diagnosis is inconclusive, or when the hemangioma leads to mechanical symptoms or complications.<sup>[2]</sup> Herein, we present a case report of giant cavernous hemangioma in left lobe of liver in 48 year old female patient presented with abdominal mass and discomfort.

### Case Report

A 48 year old female patient presented with history of abdominal discomfort and mass since 6 months duration. The past, personal (non alcoholic, non smoker), family history and treatment history was non contributory. On physical examination patient was slightly pale without features of jaundice. The abdominal was mildly distended by an isolated anterior abdominal mass which was mobile, tender on palpation. Laboratory abdominal examination revealed mild anemia; Liver and renal function test were within normal range. Hepatitis B and C markers were negative and alpha fetoprotein levels were in normal range. CT scan revealed large well circumscribed hypodense SOL seen in segment II and III of the left lobe of the liver with large exophytic component bulging inferiorly (Figure 1). Patient underwent laprotomy and left lobectomy was performed. Postoperative period was uneventful and she received 450 ml of blood to reconstitute blood loss during surgery.

Specimen was received in surgical pathological section. On gross examination outer surface was smooth with focal congested areas. Cut section revealed haemorrhagic mass measured 16.5 x 14 x 9 cms and was soft, spongy in consistency (Figure 2). Microscopy revealed a tumor composed of large irregular cavernous spaces lined with endothelial cells and filled with blood, separated by fibrous stroma. Periphery showed a normal hepatic parenchyma with intervening vascular spaces. Histopathological diagnosis of cavernous hemangioma was made (Figure 3 & 4).

### Discussion

Cavernous Haemangioma is the most common benign mesenchymal hepatic tumor. Its frequency at autopsy varies from 0.4 to 20%. The size varies from less than 1cm to greater than 20%. When larger than 4 cms, they are called giant haemangiomas.<sup>[3]</sup> They are seen more frequently in women (60-80%), between 3<sup>rd</sup> and 5<sup>th</sup> decade of life and usually single (80%).<sup>[4]</sup> Some authors suggest hepatic hemangioma are hamartomatous malformation. Oestrogens play role in their development, growth, and increase in symptoms is seen during pregnancy and patients on oral contraceptive.<sup>[3]</sup> Biopsies of hemangioma are usually not necessary and can be associated with significant bleeding.

Giant Hemangiomas may develop consumptive coagulopathy and present with disseminated intravascular coagulation ( Kasabach – Merritt syndrome). Lesions greater than 4 cms and 10 cms present with symptoms in 40% and 90% respectively and include abdominal discomfort, pain, fullness, early satiety or nausea. Pain is due to infarct, necrosis, pressure on adjacent structures, distention of capsule or high blood pressure.<sup>[3,5]</sup>

In general, the finding on ultrasonography of a suspected hemangioma should be diagnostically integrated with CT scan or MRI to ensure a correct diagnosis. Dynamic computed tomography (CT), has a sensitivity and specificity varying from 55% to more than 90%. Lesions are seen as hypodense, with early peripheral enhancement, centripetal filling, and complete opacification at 3 minutes. MRI has a sensitivity of greater than 90%, lesions are seen as well circumscribed low signal intensity on T<sub>1</sub> and high intensity on T<sub>2</sub> images.<sup>[6]</sup> Angiography is resorted to other diagnostic modalities fail.

Surgical resection is required in less than 2% cases for persistent abdominal complaints or rare progressive growth. Usually surgical enucleation is done, laproscopic hepatectomy is described for haemangioma.<sup>[7]</sup> Kasabach Merritt syndrome may warrant a liver transplant.

### Conclusion

Hemangiomas are a congenital vascular malformations, most common benign tumors of the liver and are usually asymptomatic and require periodic evaluation. However, Giant he-

mangiomas are usually symptomatic. Surgical treatment is indicated in the majority of cases.

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Figure 1. Contrast CT showing a large well circumscribed hypodense SOL in segment II & III of the left lobe of liver with large exophytic component bulging inferiorly.



Figure 2: Gross specimen on cut section revealed haemorrhagic mass soft, spongy in consistency

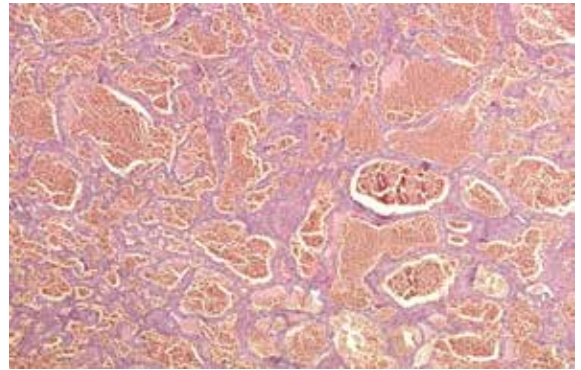


Figure 3: Scanner view showing cavernous spaces lined with endothelial cells filled with blood

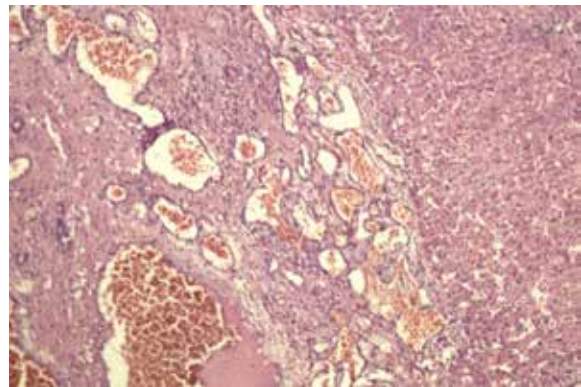


Figure 4 : Low power view showing hepatic parenchyma (black arrow) with tumor composed of cavernous spaces filled with blood (white arrow).

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