

Giant Cavernous Hemangioma of Liver- A Rare Case Report

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Abstract: Hemangiomas of the liver are the most common benign tumours of the liver. Amongst the hepatic haemangiomas, giant forms and multicystic type are extremely rare. We report a case of giant multi cystic hepatic haemangioma in a 42-year-old woman, which was found incidentally during ultrasound screening, who presented with acute abdomen. In this report, the radiological findings are illustrated and correlated with pathological findings.

Keywords: Hemangiomas, Benign, cavernous, giant multicystic

INTRODUCTION

Benign liver lesions may be solid or cystic and arise from hepatocellular or biliary epithelial cells or mesenchymal cells. More than 50% of incidentalomas are hemangiomas or focal nodular hyperplasias and Benign cystic lesions. Most of them are asymptomatic or can present as life threatening complications like hemorrhage or malignant transformation. hence should be respected. In the absence of symptoms[1]. Advances in imaging techniques have greatly improved the clinicians ability to differentiate from other benign tumours MRI(Magnetic resonance imaging) may be the most useful imaging modality. Two variants are recognized, capillary hemangioma though more common are clinically insignificant and are of <2cm size, cavernous hemangiomas are more relevant clinically for their potential for complications and symptoms. size ranges from 1cm to 30-40cm giant hemangiomas are large pedunculated with sharp demarcation, partly necrotic or fibrotic. Incidence varies from 0.4-20% of autopsy series[2-3].

CASE HISTORY

This case of ours is a female of 42yrs who presented with epigastric mass since 2 months. History of blunt injury abdomen 1 month back on examination epigastric lump with tenderness was observed. clinically diagnosed as hemangioma of left lobe of liver. ultrasound abdomen at government health centre s/o hemangioma of left lobe of liver. Then patient was referred to our institute further computerised tomography(CT scan) of abdomen -LIVER: enlarged, and lesion of size 8.2X15X7.7cm in the left lobe of liver. So Giant cavernous hemangioma left lobe of liver with multiple small lesions. Impression- multiple homogenous enhancing mass lesion showing early

nodular enhancement in both lobes, largest in left lobe. Suggestive of giant cavernous hemangiomas. (figure1) Moderate splenomegaly. Ultrasound Guided FNAC was done and reported as paucicellular cytospins with few endothelial cells against hemorrhagic background. Negative for malignancy. Computerised tomography (CT Chest) – Normal study Chest x ray PA view- Normal study. Gastroscopy- Normal mucosal study. Endoscopy- Normal study. Colonoscopy- Normal study. HIV and HBSAg- Non reactive. Preanesthetic check up was nil remarkable. Laboratory investigations revealed, Haemoglobin-9.4g% :WBC- 5600 cell/cmm:CT-5 min:BT- 1min:Serum Urea- 20 mg/dl: Serum creatinine- 0.9 g/dl:Serum electrolytes- Sodium- 136mmol/l;Potassium-5.6mmol/l; Serum total proteins= 8.5g/dl; Serum albumin- 4.6 gm/dl; Serum globulin- 2.7gm/dl; A/G ratio- 1.7; Total bilirubin- 0.4mg/dl; Direct bilirubin- 0.1mg/dl; ALP- 86U/L; SGPT- 17U/L; SGOT-23u/L.



Fig- 1: Computerised tomographic image of giant cavernous hemangioma of left lobe of liver-multiple

GROSS PATHOLOGY

Received Partial hepatectomy of size 18X9 cms. Surface was lobulated. Cut section showed cystic

area with loculations of size 10X8 cms which showed honey combed appearance. Hemorrhagic and congested areas..(figure 2 and 3)



Fig- 2 : Left hepatectomy specimen



Fig-3: Cut surface showing cystic mass with loculations and haemorrhage.

MICROSCOPY

Showed tumor with numerous interconnected, dilated and congested vascular channels. The interface showed infiltration into the adjacent liver parenchyma by these blood vessels with areas of hemorrhages. Rest of the parenchyma showed mild periportal inflammation and fatty change.



Fig-4: (10X) hematoxylin and eosin stained sections with tumour showing vascular channels and adjacent liver parenchyma

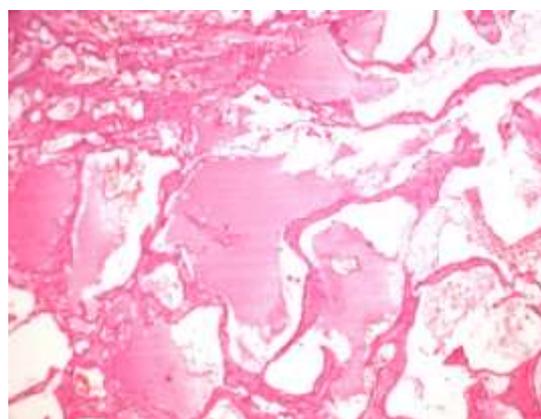


Fig-5 : (40X). hematoxylin and eosin stained sections with tumour showing vascular channels and adjacent liver parenchyma

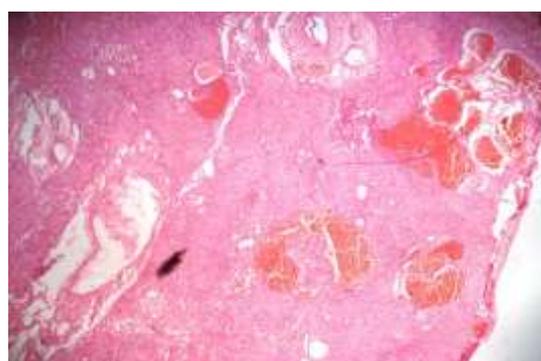


Fig-6: (10X) Hematoxylin and eosin stained section of liver parenchyma showing infiltration by tumour and periportal inflammation.

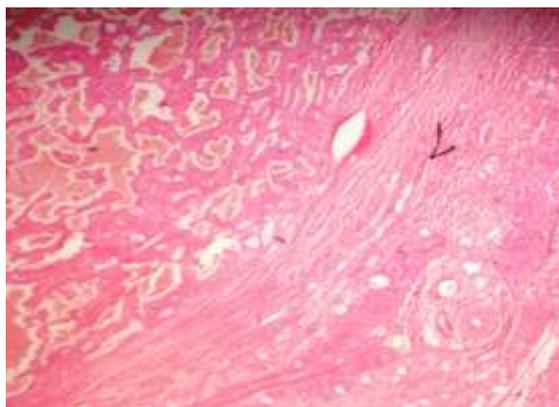


Fig-7: (40X).hematoxylin and eosin stained section of liver parenchyma showing infiltration by tumour and periportal inflammation.

DISCUSSION

Hemangiomas are most common benign solid tumours of the liver .most of them are small in size and asymptomatic. Rarely they grow to larger or gigantic forms causing symptoms, which need surgical treatment for alleviation of symptoms. More common in female adult population with mean age of 42 years. Their etiology represents progressive growth of congenital lesions and also role of sex hormones in stimulating growth and producing symptoms. Histologically 4 variants are described 1)fibrolamellar interface variant 2) interdigitating interface variant 3)compression interface variant 4)spongy(irregular) interface variant. Despite these variants, they are not premalignant in behaviour[4]. clinically they can be asymptomatic or they can present with pain abdomen or mass syndrome, hepatomegaly, acute abdominal crisis due to sudden increase in size or rupture with peritoneal haemorrhage and consumptive coagulopathy in severe cases and in giant forms. When associated with kasaback- Merritt syndrome they can be associated with extreme rare occurrences like diffuse hemangiomatosis and can involve multiple organs. they need to be differentiated from peliosishepatus and hereditary hemorrhagic telangiectasia[5]. immunohistochemically they are positive for CD31,CD34,Factorviii.Factor viii related antigen, GLUT1 Particularly in congenital vascular malformations with capillary proliferation. *Hemangiomas* are hyperechoic, very sensitive well demarcated Isodense on noncontrast and Isodense on T1. Hyperdense on T2. Blood pooling of Central venous system shows delayed nodular Gadolinium-enhanced radionucleotide pooling enhancement from the scan has similar Delayed central periphery of the lesion findings to contrast filling CT [6-7].Treatment of incidental tumours depends on several factors like size,

aspect, number of lesions and clinical background[8].Treatment modalities are surgical ligation of feeding vessels, hepatic irradiation and orthotopic liver transplantation in large or diffuse lesions[9].

CONCLUSION

Hepatic hemangiomas are most common vascular malformations which are usually asymptomatic and giant forms can be symptomatic, which can present as acute abdominal crisis. They are more common in the right lobe of the liver than in the left lobe. Hence we present this case of ours a giant form of the cavernous hemangioma of the left lobe of the liver which had a uncommon presentation.

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