

## Research Article

### HAEMANGIOMA LIVER- WHEN TO INTERVENE

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**Abstract:** **Introduction:** Hepatic haemangioma is the most common benign, non-cancerous tumor of the liver, consisting of a cluster of blood-filled cavities (cavernous haemangiomas). They are often found incidentally on imaging (US, CT, MRI) in adults aged 30–50, with a higher prevalence in women (up to 5:1 ratio). Most are small, asymptomatic, and require no treatment, though giant haemangiomas i.e. > 5 cm may become symptomatic and require intervention. **Case Report:** A 50-year-old female, not a known case of any chronic illness presented with complaints of non-ulcer dyspepsia for last six months. She used to have distension of stomach after taking food, early satiety, epigastric pain and sometimes acid reflux in mouth during sleeping in night. She was obese with body mass index of 30. The local private practitioner treated her with proton-pump inhibitor along with pro-kinetics. It gave her partial relief. Hence, at this point of time due to incomplete relief, she came for consultation to our department. Her general physical examination and systemic examination was non-contributory except for obesity. All her biochemical labs were normal except for hypercholesterolemia and hypertriglyceridemia. The viral screen, ECG, Chest x-ray was normal but ultrasonogram revealed a lesion of 5 cm in right lobe of liver. The alpha feto proteins level was in normal range and triple phase computed tomography scan confirmed the lesion to be hepatic haemangioma. The treatment of non-ulcer dyspepsia was modified and she was put on esomeprazole and itopride combination, along with dietary advices for weight reduction. She responded to treatment and even lost 7 kg of weight in three months. The repeat ultrasonogram abdomen showed same size of haemangioma, hence the same is being followed conservatively. **Conclusion:** The most important decision in hepatic hemangioma is to differentiate it from malignant lesion, so that wrong diagnosis should not allow malignant lesion to metastasize, after which no definitive treatment is denied. The size of hemangioma, symptoms and other co-factors depending upon patient decides the conservative or intervention approach. The same should be given as per scientific rationale and guidelines. As, majority of hemangiomas are of small size and asymptomatic, but they lead to unnecessary apprehensions in patient and family members and they should be allayed by the treating team members.

**Keywords:** Hemangioma, Ultrasonogram abdomen, CT scan, Alpha feto-protein, Pain abdomen

## INTRODUCTION

Hepatic hemangioma is the most common benign tumor of the liver, and most of the pathological types are cavernous hemangioma [1,2]. The common clinical symptoms of hepatic haemangioma are upper abdominal discomfort, dull pain, abdominal distension, and loss of appetite, which are caused by the tumor pulling the liver capsule or pressing the adjacent tissues and organs of the gastrointestinal tract. In recent years, with the popularization of physical examinations and the advancement of various imaging diagnostic techniques, the discovery rate of asymptomatic diseases has increased significantly. The diagnosis of hepatic hemangioma mainly depends on various imaging examinations, whereas the treatments of hepatic hemangioma include surgery, hepatic artery embolization, and radiofrequency ablation [3,4]. The clinical manifestations of hepatic haemangioma are not specific, and majority of patients are asymptomatic. Hence, diagnosis depends mainly on imaging examinations, such as ultrasound, computed tomography (CT) and magnetic resonance imaging (MRI). The

ultrasound shows hepatic haemangioma as a clear echogenic space with a clear echo enhancement effect whereas CT scan depicts it as a uniform and clear low-density lesion with nodular enhancement after giving contrast. around the low-density area is shown. MRI on T1-weighted image shows a uniform low signal with clear edges, while the T2-weighted image shows a distinctly high signal, which is a typical light bulb sign [5-7]. In addition to radiological investigations, detailed clinical history, along with tumour markers like alpha-fetoprotein and CA19-9 play a vital role in differentiating haemangiomas from malignant lesions. In case of diagnostic dilemma, surgical exploration should be done for both diagnostic and therapeutic purpose [8,9]. The key factors in the treatment of hepatic haemangioma are tumor size and location. Hepatic haemangioma with diameter >10 cm is termed as large hepatic haemangioma, and those with diameter >15 cm to as giant hepatic haemangiomas. Patients with tumours <5 cm are small hepatic haemangiomas which are usually asymptomatic and associated with few complications, such as rupture and hemorrhage, thus should remain under surveillance. Large hepatic haemangioma located

especially at the edge of the liver or in the hilar is prone to rupture or compression of the hilar bile duct and blood vessels and is often accompanied by coagulopathy caused by Kasabach-Merritt syndrome, required early treatment. The diameter of the tumor at about 5–10 cm is regarded as a relative treatment indication. Surgical treatment should be carried out on the patients who have small hemangioma that cannot be distinguished from malignant tumours and have a medical history of chronic hepatitis or positive detection result of tumor markers. In addition, sportspersons like boxers and football players, may consider early surgery to prevent the traumatic rupture of hepatic hemangioma. Since oestrogen and progesterone can stimulate the growth of hepatic hemangioma, the young women who are diagnosed giant hemangioma should be informed of the hemangioma removal [10]. The surgical treatments of hepatic hemangioma is decided on case basis and includes surgery, hepatic artery embolization, radiofrequency ablation, radiation therapy, intraoperative microwave coagulation, cryotherapy, and sclerotherapy. The ideal approach is complete removal of the lesion, if not contraindicated. The surgical treatments of hepatic hemangioma mainly include hepatic hemangioma extracapsular dissection, anatomical hepatectomy, laparoscopic and robotic hepatic hemangioma surgery, and hepatic hemangioma suture.

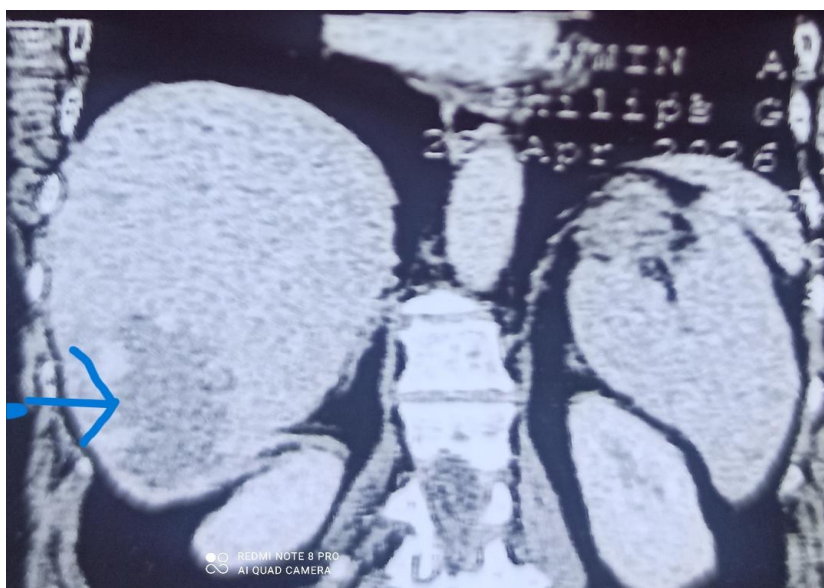
## CASE REPORT

A 50-year-old female, not a known case of any chronic illness presented with complaints of non-ulcer dyspepsia for last six months. She used to have distension of stomach after taking food, early satiety, epigastric pain and sometimes acid reflux in mouth during sleeping in night. She was obese with body mass index of 30. The local private practitioner treated her with proton-pump inhibitor along with pro-kinetics. It gave her partial relief. Hence, at this point of time due to incomplete relief, she came for consultation to our department. Her general physical examination and systemic examination was non-contributory except for obesity. All her biochemical labs were normal except for hypercholesteremia and hypertriglyceridemia. The viral screen, ECG, Chest x-ray was normal but ultrasonogram revealed a lesion of 5 cm in right lobe of liver. The alpha feto proteins level was in normal range and triple phase computed tomography scan confirmed the lesion to be hepatic haemangioma. The treatment of non-ulcer dyspepsia was modified and she was put on esomeprazole and itopride combination, along with dietary advices for weight reduction. She responded to treatment and even lost 7 kg of weight in three months. The repeat ultrasonogram abdomen showed same size of haemangioma, hence the same is being followed conservatively.

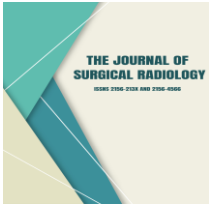
## CONCLUSION

- The most important decision in hepatic hemangioma is to differentiate it from malignant lesion, so that wrong diagnosis should not allow malignant lesion to metastasize, after which no definitive treatment is denied. The size of hemangioma, symptoms and other co-factors depending upon patient decides the conservative or intervention approach. The same should be given as per scientific rationale and guidelines. As, majority of hemangiomas are of small size and asymptomatic, but they lead to unnecessary apprehensions in patient and family members and they should be allayed by the treating team members.

**CONFLICT OF INTEREST-** The authors declare that there was no conflict of interest and no financial support was taken for the same.



**Figure 1** –Computed tomography scan showing Hemangioma in right lobe of liver (blue arrow)



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