## **Case Report**

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# **Cavernous haemangioma of spleen: a rare case report**

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### ABSTRACT

Tumours of the spleen are as such rare. Of these rare tumours, haemangioma is the most commonly encountered benign tumour with fewer than 100 cases reported. It is either an incidental finding or presents as splenic enlargement or with complications. Preoperative investigations are often inconclusive and may not distinguish between haemangioma and metastases. We report a case of 40 years female with cavernous haemangioma of spleen presenting as massive splenomegaly. Splenic haemangioma presenting as massive splenomegaly is extremely rare and deserves a mention.

Keywords: Haemangioma, Spleen, Massive Splenomegaly

### **INTRODUCTION**

Tumors of the spleen are rare, amongst which haemangioma is the most common non- lymphoid benign vascular tumour.<sup>1</sup> It is usually detected incidentally but can be symptomatic when presented with massive splenomegaly.<sup>1</sup> It may be associated with haemangiomas of other sites (angiomatosis).<sup>2</sup> We are presenting a case of 40 years old female with abdominal lump of 6 months duration associated with dragging pain, diagnosed clinically as massive splenomegaly. On imaging studies it was diagnosed as polycystic spleen which revealed cavernous haemangioma on histopathology.

#### **CASE REPORT**

A 40 years female presented with painful lump in abdomen and breathlessness since 6 months. Symptoms gradually increased over the period of time. There was no history of fever. On examination, she had pallor and grade IV Splenomegaly with no lymphadenopathy. On investigation, haemoglobin was found to be low (6 g/dl) with microcytic hypochromic anaemia while leukocyte and platelet counts were within normal limits. Her coagulation profile was normal. An ultrasound confirmed gross splenomegaly of 30 cm with multiple anechoic cystic spaces throughout the spleen suggestive of polycystic spleen. A computed tomography (plain and contrast) scan showed multiple well defined, thin walled, non-enhancing cystic densities of varying size diffusely scattered in the splenic parenchyma with few cystic lesions showing calcification; possibilities included were isolated polycystic spleen disease and splenomegaly with hydatid disease (Figure 1). Splenectomy was done for symptomatic relief. We received Spleen of size 30×20×10 cm, weighing 425 grams. External surface was bosselated (Figure 2). Cut section showed multiple cystic spaces ranging from 0.5 cm to 4 cm diameter. Focal areas of calcification were also seen (Figure 3). Histologically, haematoxylin and eosin stained sections showed large, dilated blood filled spaces lined by single layer of bland endothelial cells, without mitosis and surrounded by stroma (figure 4A; 4B).

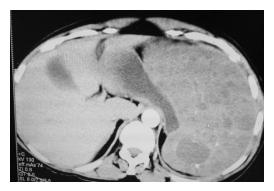


Figure 1: CT scan Abdomen showing non-enhancing cystic densities of varying size diffusely scattered in the splenic parenchyma.



Figure 2: Massively enlarged spleen with bosselated surface.



Figure 3: Cut section showing multiple cystic spaces.

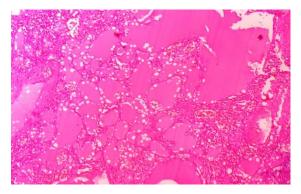


Figure 4A: Multiple vascular spaces lined by endothelial cells surrounded by stroma (HE 10X): Cavernous haemangioma of spleen.

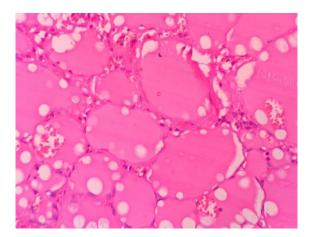


Figure 4B: Multiple vascular spaces lined by single layer of bland endothelial cells surrounded by stroma without cytological atypia (HE 40X): Cavernous haemangioma of spleen.

#### DISCUSSION

Splenic hemangioma was first described by Virchow in 1863 and since its introduction into the medical literature, fewer than 100 cases have been reported.<sup>3</sup> Although the etiology of splenic hemangiomas is unknown, it has been suggested that they represent a congenital nevus that may or may not enlarge to become symptomatic.<sup>4,5</sup> Due to the slow growth rate of these tumors, most are found in patients in their third to sixth decades of life, although some have been reported in the pediatric literature.<sup>4,6</sup> Most splenic hemangiomas are discovered incidentally, and their clinical importance generally lies in differentiating them from other conditions, particularly from metastases. Occasionally they may be symptomatic. The clinical manifestations of symptomatic lesions appear to be associated with tumour size. They may be associated with splenomegaly, abdominal pain, dyspnoea, diarrhoea, or constipation. No potential for malignancy exists. Haemangiomas are not treated unless they are symptomatic or very large, with increased risk of haemorrhage; treatment is splenectomy.<sup>7</sup> In our case, the patient was symptomatic due to massive splenomegaly and splenectomy was performed for symptomatic relief.

In 1945, Bostick surveyed 16 patients with splenic hemangiomas and a palpable abdominal mass and found that 62% had pain, 12% had anemia, 12% had ascites, and 18% had weight loss.<sup>5</sup> Thrombocytopenia has also been described.<sup>8</sup> Another survey found that when patients presented with symptoms, they had pain, left upper quadrant fullness, or a palpable mass.<sup>3</sup> The most serious complication described in the literature is that of spontaneous rupture, the likelihood of which is related to tumour size.<sup>3,4</sup> Large haemangioma have been associated with anaemia, thrombocytopenia, and consumptive coagulopathy (Kasabach-Merritt syndrome) with increased risk of haemorrhage.8,9 Splenectomy is indicated when the tumour is large and causes discomfort to the patient.

#### CONCLUSION

Although splenic tumours are as such rare, of which haemangioma being the most common benign vascular neoplasm, should be kept in differential diagnosis as it may lead to fatal complications like haemorrhage if neglected.

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