

Case Report

Spontaneous rupture of splenic hemangioma: a case report

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ABSTRACT

A 40 year old female presented with complaints of dysphagia, and regurgitation. On examination abdomen was soft, non tender, not distended and had no palpable organomegaly. Patient was diagnosed of hiatus hernia after undergoing upper gastro intestinal scopy and barium swallow. Patient was planned for nissens laproscopic fundoplication. Intra-operatively patient was found to be having a large splenic hemangioma. Postoperatively patient had deep vein thrombosis for which intra-venous heparin was given. Post heparinization patient went into shock and ultrasound revealed a large collection in peri-splenic, spleno-renal spaces. Splenic hemangiomas are the 2nd common benign tumors of the spleen. Incidence of splenic hemangioma is 0.02-0.16%. Spontaneous rupture of splenic hemangioma occurs rarely and is dreadly complication of splenic hemangioma. They may represent a congenital nevus. Patients present with splenomegaly, abdominal pain, hypotension and dyspnea. A ultrasound would show a fluid collection in peri splenic areas. Emergency splenectomy is the treatment of choice for these patients.

Keywords: Splenic hemangioma, Spontaneous rupture, Post heparinization, Shock, Hemangioma, Emergency splenectomy

INTRODUCTION

Splenic hemangioma is a rare disorder but remains the second most common benign neoplasm of the spleen.¹ Etiology of splenic hemangioma is not exactly known. It has a female preponderance with age of presentation being around 55-65 years.² It is often asymptomatic, but may sometime present as a non-tender mass, thrombocytopenia. Spontaneous rupture of splenic hemangioma is very rare and has been reported to occur in as many as 25% of total patients with splenic hemangioma. Spontaneous rupture patients present with shock, abdominal distension they may also sometime mimic myocardial infarction, pulmonary embolism. It can be identified on an ultrasound as a large fluid collection in the peri splenic space. Treatment of symptomatic splenic hemangioma is splenectomy.

CASE REPORT

A 40 year old female presented with dysphagia, retro sternal burning pain and regurgitation. Symptoms increased on taking food. Patient had no history of vomiting, abdominal pain, odynophagia. On examination abdomen was soft, no palpable organomegaly was present; no cardiovascular abnormality was present. UGI scopy showed lax LES with OG junction at 28 cms and gastric mucosa herniating into esophagus (Figure 1). Barium swallow revealed sliding type of hiatus hernia (Figure 2). Ultrasonography showed a splenic hemangioma. Patient has underwent laparoscopic fundoplication (Nissens repair). Intraoperatively patient was found to be having a large splenic hemangioma (Figure 3). Surgery was uneventful and a safe distance is maintained from the hemangioma all through the surgery.

Post operatively POD-1 patient was comfortable; On POD-2 patient complained of left lower limb swelling and pain in left thigh. Doppler revealed a left iliofemoral DVT. Patient was started on Inj.Heparin 5000 IU IV for DVT. An hour post heparinization patient developed sudden breathlessness and irritability. On examination patient was having severe pallor and had abdominal distension. Ultra sonogram revealed massive fluid collection of spleno-renal and peri splenic areas. Hemoglobin had dropped from 10.2g% to 3.5g%. Patient was planned for emergency laparotomy. Before the commencement of laparotomy patient had undergone a irreversible cardiac arrest inspite of CPR and resuscitative measures.



Figure 1: UGI scopy showing Lax LES.

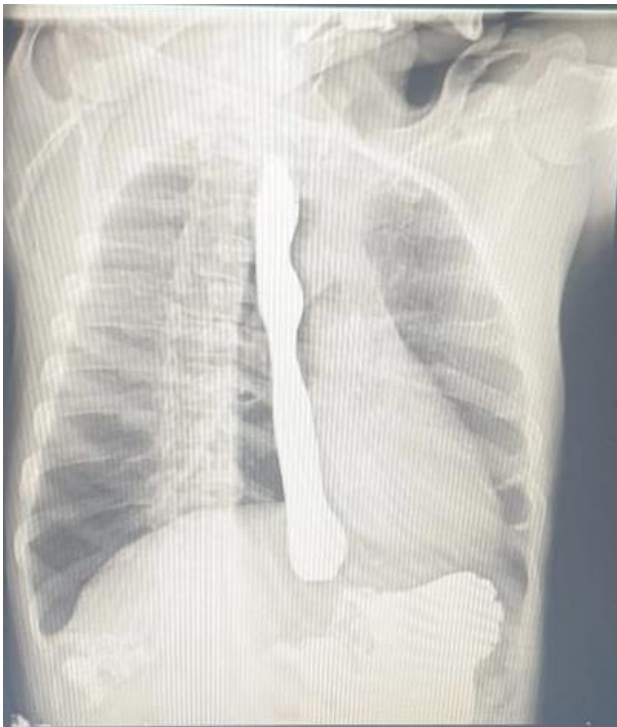


Figure 2: Barium swallow showing hiatus hernia.

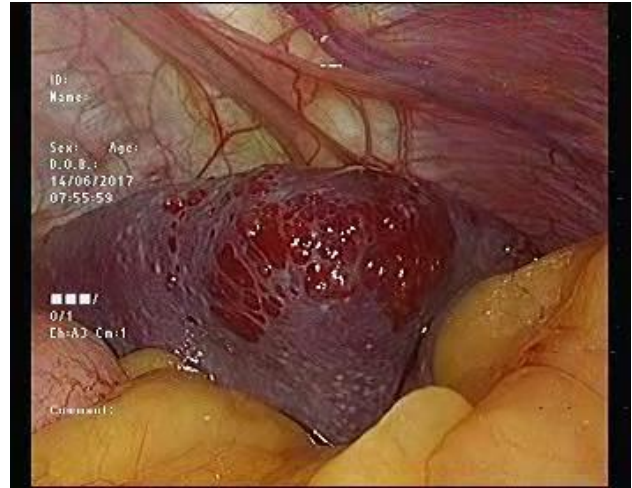


Figure 3: Intra operative picture showing splenic hemangioma.

DISCUSSION

Splenic tumors are a rare entity of which hemangioma is the 2nd most common benign tumor. Splenic hemangiomas is the most common benign vascular tumor of spleen.¹ It was first described by Virchow in 1863, around 100 cases are been reported till now.^{2,3} Incidence of splenic hemangioma is 0.02% to 0.16% with autopsy prevalence of 1–14%. It is most commonly seen in adults around 30 to 50 years of age. Although etiology of splenic hemangioma is unknown, it is suggested that it may represent a congenital nevus.¹

Splenic hemangiomas are generally asymptomatic and are diagnosed incidentally.¹ They may also present with complaints of splenomegaly, abdominal pain, dyspnea. Splenic hemangiomas may also be seen associated with kippel – Trenaunay Weber syndrome, Beckwith – Weidemann syndrome.⁴ They are diagnosed on ultrasonography and CT scan with CT being more precise.⁵ Histopathologically they are cystic, blood filled spaces of varying sizes and on microscopy it shows vascular spaces lined by a single flat layer of endothelium.^{1,2} Complications of splenic hemangiomas are spontaneous rupture, infraction, thrombosis, anemia, thrombocytopenia, coagulopathies and Kasabach – merit syndrome. But they carry no potential risk of malignancy.

Spontaneous rupture is noted in 25% of cases of splenic hemangioma. This carries almost 50% mortality.⁵ They present from generalized tenderness with rigidity to a full blown hypovolemic shock.^{6,7} It may mimic MI, pulmonary embolism, cardiogenic shock. Splenic hemangioma rupture is a rare cause of abdominal hemorrhage.⁸ Heparin use in these patients may exacerbate the hemmorrhage. In this case carbon dioxide that was used for creating pneumo-peritoneum would have injured the endothelial wall of the hemangioma and heparin use may exacerbate the hemmorrhage.^{9,10} Spontaneous rupture of splenic hemangioma post

thrombolysis is very rare with only 1 case reported by Norris et al in English literature.⁶ Weiss et al also reported a case of spontaneous rupture of spleen post subcutaneous heparin therapy.⁷ Mainstay of treatment in case rupture is splenectomy. However Yakub et al has described coil embolisation in stable patients.¹¹

CONCLUSION

Spontaneous rupture of splenic hemangioma is a life threatening condition when not addressed in time. We present this case as it is very rare to have spontaneous rupture of splenic hemangioma post thrombolysis with only one case reported till date. We conclude by stating that physicians should be aware of this situation while giving thrombolysis treatment to patients with splenic hemangioma.

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