

CASE REPORT

Splenic Lymphangioma: A Rare Tumour of Spleen in Adults

Nisar A Chowdri M.S.,¹ Syed Muzamil Andrabi M.S.,² Javaid Ahmad Bhat M.S.,³
Mubashir Ahmad Shah M.S.⁴

¹ Professor, ^{2,3} Senior Residents, ⁴ Additional Professor
Department of General and Minimal Invasive Surgery

ABSTRACT

Splenic Lymphangioma is a rare, benign, cystic lesion arising from malformations of splenic lymphatic channels. They are usually found in paediatric population and rarely in adults. Isolated lesions are asymptomatic and detected incidentally. However larger lesions present with abdominal discomfort, loss of appetite or a palpable mass. Surgical removal of spleen remains the treatment of choice. A 25 year old, unmarried female presented 2 months history of pain epigastrium. Abdominal ultrasonography revealed a well defined hypoechoic area in relation to lower pole of spleen with normal splenic and portal vein. Computed tomography with contrast enhancement showed mild splenomegaly with multiple hypodense lesions with peripherally enhancing rim and decreased central attenuation with likely possibility of angiosarcoma of spleen. JMS 2018; 21 (2):122-124

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INTRODUCTION

Lymphangioma of spleen is a rare benign and slow growing tumour that is seen rarely in children and even rarer in adult population.⁽¹⁾ So far, fewer than 100 cases of spleen lymphangiomas have been reported in the literature.⁽²⁾ These are congenital malformations of the lymphatic vessels and are usually located in the head and neck region and rarely in intra-abdominal and retroperitoneal location.

Their clinical presentations widely vary and they are generally detected incidentally. However larger lesions can cause compression of the adjacent organs, resulting in pain or can even rupture following a trivial trauma.⁽³⁾ Surgical removal whether laparoscopic or open is the treatment of choice in large symptomatic splenic lymphangiomas in view of life threatening complications like rupture and haemorrhage.⁽⁴⁾

Case Report

A 25 year old, unmarried female came to the outpatient department of general surgery, Sher-i-Kashmir institute of Medical Sciences, Srinagar, J&K, India with 2 months

history of pain epigastrium. General physical examination was unremarkable and abdominal palpation revealed splenomegaly. Laboratory tests were within normal limits. Abdominal ultrasonography revealed a well defined hypoechoic area in relation to lower pole of spleen with normal splenic and portal vein. Computed tomography with contrast enhancement showed mild splenomegaly with multiple hypodense lesions with peripherally enhancing rim and decreased central attenuation with likely possibility of angiosarcoma of spleen (fig. 1). High resolution computed tomography of chest was grossly normal.

Patient was taken up for splenectomy. Intraoperatively spleen was found to be enlarged and bosselated (fig. 2). Splenectomy was performed without any complication. Histopathological examination of the specimen revealed, a lesion measuring 4x3 cm on anterior pole of spleen. Other two lesions measuring 3x3 cm each were also located near anterior pole of spleen. Splenic capsule was intact. Cut section on gross examination showed irregular infiltrative lesion filled with yellowish material (fig. 3). Microscopic examination of the lesions showed dilated thin lymphatic vessels containing lymph and intervening stroma showing dense fibrosis, features consistent with lymphangioma (fig.4).

Correspondence

Dr. Syed Muzamil Andrabi
Senior Resident,
Department of General Surgery SKIMS, Srinagar
Email: syedmiaz67@gmail.com

DISCUSSION

Splenic Lymphangioma is a rare, benign, cystic lesion arising from malformations of splenic lymphatic channels. They are usually found in paediatric population and rarely in adults. The clinical manifestations of splenic lymphangiomas are related to the size of lesion. Isolated lesions are asymptomatic and detected incidentally. However larger lesions may present with abdominal discomfort, loss of appetite or a palpable mass.^(5,6) Complications of large lymphangiomas include rupture or infection of the cyst leading to acute abdomen.⁽⁷⁾ However rare complications such as consumption coagulopathy, hypersplenism, bleeding, portal hypertension and hypertension due to renal artery compression have also been reported.⁽⁸⁾

Surgical removal of spleen remains the treatment of choice. Minimally invasive treatment modalities like aspiration, sclerosis and irradiation have shown unsatisfactory results. Small asymptomatic lesions detected incidentally do not need any treatment and can be followed by ultrasonography.⁽⁹⁾ Partial resection techniques can also be applied in limited diseases; however leaving a splenic remnant increases the risk of recurrence. Laparoscopic splenectomy in normal to moderately enlarged spleen is emerging as the procedure of choice. Massive splenomegaly is a contraindication to laparoscopic management.⁽¹⁰⁾ The prognosis of splenic lymphangiomas after surgical resection is favourable. Recurrence is demonstrated in approximately 9.5% of patients and is more common after partial resection.⁽¹¹⁾

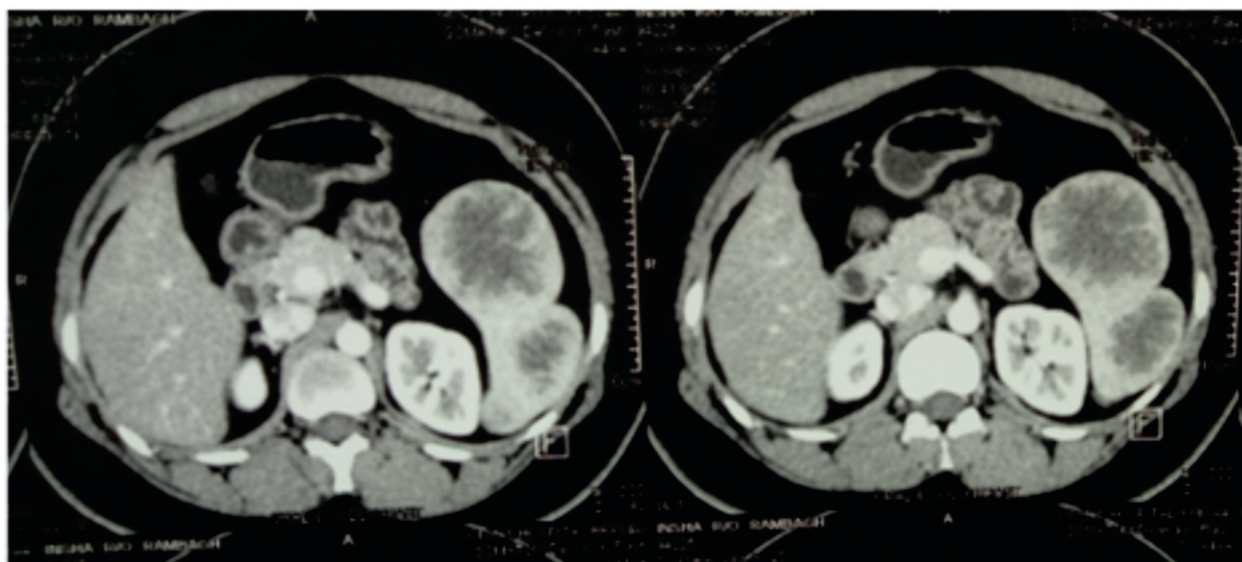


Fig. 1: CECT cut section showing multiple hypodense lesions with peripherally enhancing rim and decreased central attenuation.



Fig 2: Splenectomy specimen showing bosselated surface.

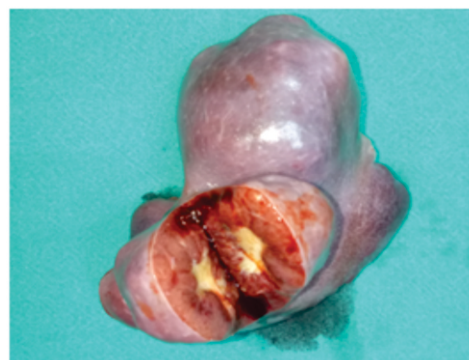


Fig. 3: Cut section showing irregular infiltrative lesion filled with yellowish material.

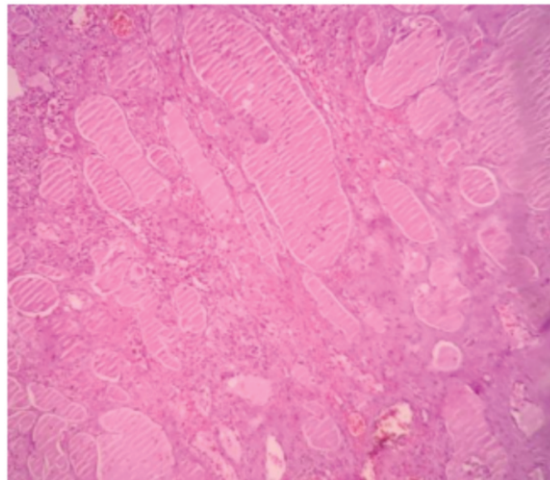


Fig. 4: Microscopic cut section of the specimen showing dilated lymphatic channels with intervening dense fibrotic stroma.

REFERENCES

1. Kim DH et al. Cystic lymphangioma involving the mesentery and retroperitoneum: A case report. *J Korean Radiol Soc* 2005; 52: 347-50.
2. Al-Shaikh SA et al. Splenic lymphangioma in an adult. *Saudi Med J*. 2017; 38(11): 1148-52.
3. Raza M et al. Splenic lymphangioma: a rare benign tumour in adults. *Int Surg J*. 2018 Oct; 5 (10): 3403-3406.
4. Morgenstern L et al. The clinical spectrum of lymphangiomas and lymphangiomatosis of the spleen. *Am Surg* 1992; 58: 599-604.
5. Abbott RM et al. Primary vascular neoplasms of spleen: Radiologic-Pathologic correlation. *Radiograph*. 2004; 24 (4): 1137-63.
6. Komatsuda T et al. Splenic Lymphangioma: US and CT diagnosis and clinical manifestations. *Abdom Imaging*. 1999 Jul-Aug; 24 (4):414-7.
7. Moir C et al. Splenic cysts: aspiration, sclerosis, or resection. *J Pediatr Surg*. 1989; 24 (7): 646-8.
8. Dietz WH et al. Splenic consumptive coagulopathy in a patient with disseminated lymphangiomatosis. *J Pediatr*. 1977; 90 (3):421-3.
9. Yu X et al. Real time contrast enhanced ultrasound in diagnosing focal spleen lesions. *Eur J Radiol*. 2012; 81(3): 430-6.
10. Maurus CF et al. Laparoscopic versus open splenectomy for non-traumatic diseases. *World J surg*. 2008; 32 (11): 2444-9.
11. Chung SH et al. Asymptomatic Lymphangioma involving the spleen and retroperitoneum in adults. *World J Gastroenterol*. 2009; 15 (44): 5620-3.