

# Cystic Lymphangioma of Mesentery - A Case Report

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**Abstract-** Lymphangiomas are malformations that occur most often in the head and neck or axilla of young children but are detected occasionally in adults at other sites such as mesentery, omentum and mesocolon. We present a case of cystic lymphangioma occurring in the splenic mesentery in a 28 year old male.

**Index Terms-** cystic lymphangioma, mesentery

## I. INTRODUCTION

Lymphangiomas are malformations that arise from sequestration of lymphatic tissue that fail to communicate normally with the lymphatic system.<sup>1</sup> They become markedly dilated under the pressure effect of accumulating lymph. Lymphangiomas can be acquired due to obstruction following surgery, irradiation or infection. Intra abdominal lymphangiomas are rare and occur in the mesentery, omentum and mesocolon.<sup>2</sup> We report a case of cystic lymphangioma occurring in the splenic mesentery in an adult.

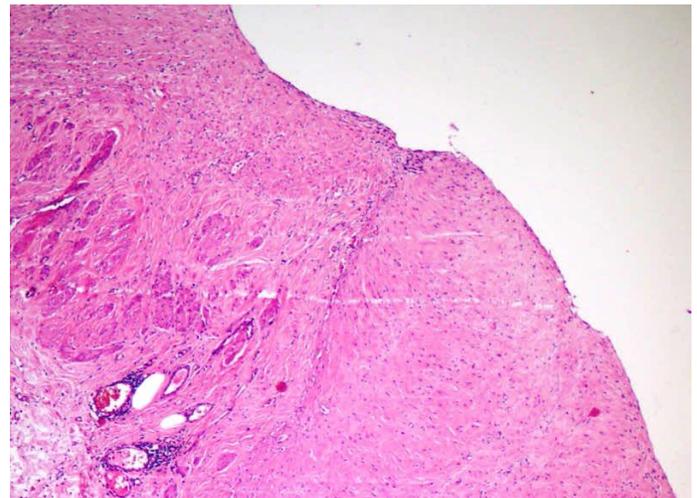
## II. CASE REPORT

A 28 year old male presented with complaints of abdominal pain of 5 years duration. USG abdomen showed a large multilocular cystic lesion in the splenic hilum. Exploratory laprotomy revealed a lobular cystic lesion measuring 22 x 22 x 4 cm in the mesentery at the splenic hilum. The cyst along with the spleen was excised and sent for histopathological examination. Postoperative period was uneventful. Gross examination revealed a multiloculated thin walled cyst measuring 22 x 12 x 4 cm filled with 600 ml of serosanguinous straw coloured fluid.

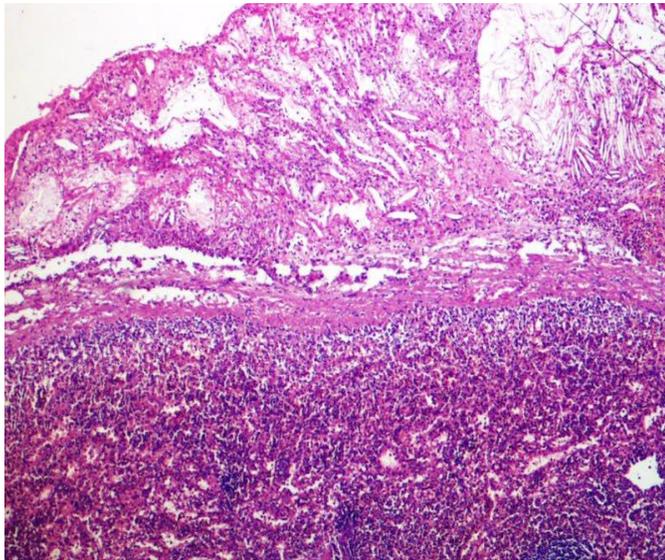


**Fig 1 .Multiloculated thin walled cyst**

On microscopic examination the cyst wall was lined by flattened endothelial cells with proteinaceous material in the lumen. Wall showed attenuated smooth muscle, lymphoid aggregates, foamy histiocytes and cholesterol clefts. A diagnosis of cystic lymphangioma of mesentery was made.



**Fig 2.Cyst wall lined by fattened endothelial cells .Wall shows smooth muscle and aggregates of lymphocytes  
H&E x100**



**Fig 3.Cyst wall seen closely adherent to spleen but not infiltrating into the parenchyma H&E x 200**

### III. DISCUSSION

Lymphangiomas usually occur in children and are commonly (95%) found in head, neck and axillary region. The remaining 5% are located in the mesentery, retroperitoneum, abdominal viscera, lung and mediastinum. Lymphangioma of abdomen is rare especially in adults.<sup>2,3,4</sup>

Lymphangiomas are classified histologically into capillary, cavernous and cystic.<sup>4,5,6</sup> The capillary lymphangiomas are usually situated superficially in the skin and consists of small thin walled lymphatics. The cavernous lymphangioma consists of larger lymphatic spaces having a connection with normal adjacent lymphatics. Cystic lymphangiomas are usually multilocular although they may be unilocular. They contain serous or chylous fluid and show dilated lymphatic spaces of various sizes associated with collagen and smooth muscle bundles in the stroma but lacks connection to the adjacent normal lymphatic spaces.<sup>5</sup>

Clinical signs and symptoms are related to the size of the lesion. Abdominal pain and distension are the common presenting features of cystic lymphangioma of abdomen. Most of these patients develop symptoms of acute abdomen caused by intestinal obstruction, volvulus or infarction.<sup>3,7,8</sup> A preoperative diagnosis is possible in most of these cases by USG or CT scan. USG shows multiple homogenous nonenhancing areas with variable attenuation.

Cystic lymphangioma has to be differentiated from cystic mesothelioma, enteric duplication cyst and pseudocyst of pancreas.<sup>2</sup> Cystic mesothelioma shows glandular spaces of varying sizes lined by mesothelial cells. Presence of an

enhancing thick wall is helpful in characterizing a lesion as either a pseudocyst or an enteric duplication cyst. Pseudocyst of pancreas is characterized by thick irregular wall with a ragged inner surface and absence of a lining epithelium. Treatment of cystic lymphangioma is complete surgical excision and sometimes may require resection of the adjacent bowel or other closely associated structures because incomplete excision may lead to recurrence.

### IV. CONCLUSION

Lymphangiomas are uncommon benign lesions that may rarely present as cystic lesions in the abdomen. Awareness of this entity is very essential while evaluating intra abdominal cystic masses.

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