

## CASE REPORT

### OMENTAL LYMPHANGIOMA: A RARE CASE REPORT

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#### ABSTRACT

Lymphangioma is a common pediatric problem. Most of the lymphangiomas occur in head and neck region. Lymphangioma arising from omentum is extremely rare. It is a benign condition but is locally invasive. Symptoms usually arise from its mass effect or complications. Complete excision including removal of all loculi is necessary for cure. We report such a case of omental lymphangioma in a six-year boy.



#### INTRODUCTION

Lymphangioma is a congenital disorder arising from abnormal development of lymphatic system. It is common problem in a pediatric age group. Common sites are neck, axilla, mediastinum and retroperitoneum. It is a benign condition and asymptomatic most of the time. It is devoid of capsule so it can infiltrate in to surrounding structures. Most of the symptoms arise from mechanical pressure effect, hemorrhage within it or torsion in pedunculated. Lymphangioma arising from omentum is a rare entity. Only few cases have been reported in literature. We report such a rare case of omental lymphangioma causing recurrent pain abdomen in a child.

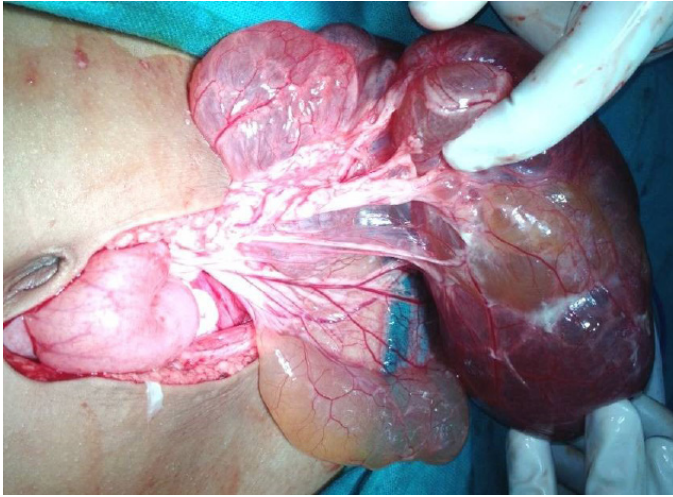
#### CASE REPORT

A six-year boy presented with recurrent mild pain abdomen for two years and gradually increasing lower abdominal fullness for one month. There were no other symptoms. On examination, he was adequately nourished and general physical examination was normal. On abdominal examination, there was a mobile, well defined 10 x 10 cm intraabdominal firm mass on lower abdomen occupying mainly hypogastric region. No abnormality detected in other systemic review. All laboratory

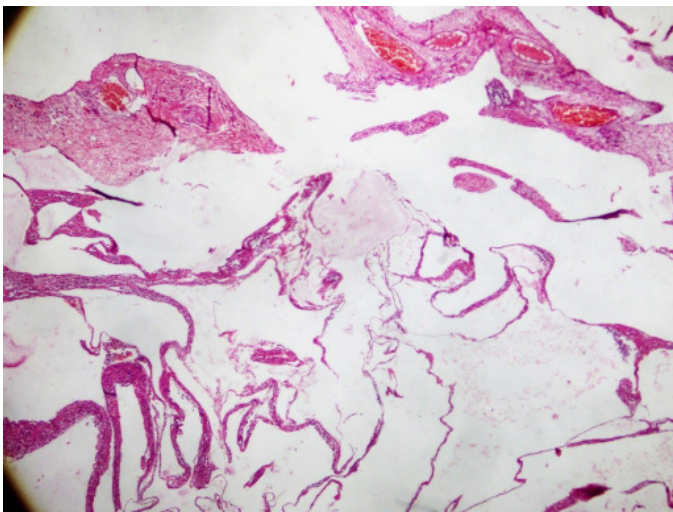
parameters were within normal limits. Ultrasound of abdomen showed a thin walled cystic lesion which was not arising from any abdominal solid organs. Liver, spleen, kidneys were normal.



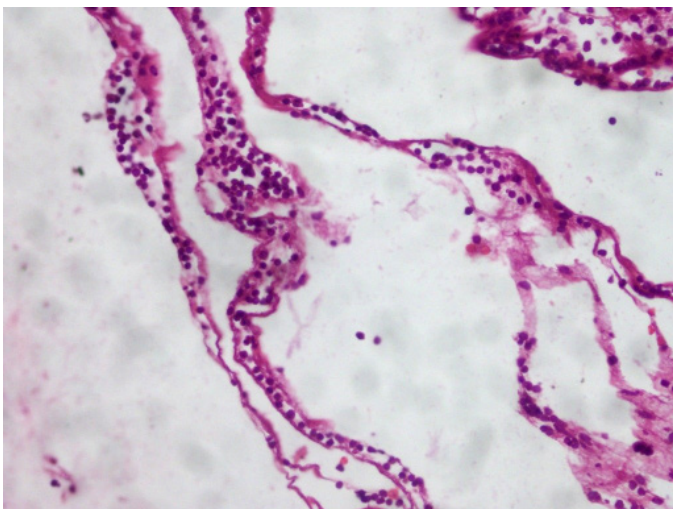
Figure 1: Large lymphangioma protruding from incision



**Figure 2: Lymphangioma attached to distal end of greater omentum**



**Figure 3: Histology showing large lymphatic channels and few scattered smooth muscles (x40 on H&E stain)**



**Figure 4: Histology showing lymphoid aggregates on wall (x100 on H&E staining)**

Exploratory laparotomy was performed with provisional diagnosis of mesenteric cyst. On laparotomy, there was a 12 x 10 cm irregular thin walled cystic lesion attached to greater omentum and containing clear fluid (Figure 1, 2).

There were at least 3 other small cysts attached to the omentum nearby. All abdominal viscera including solid organs were normal. The cysts were removed with partially omentectomy. Post operative period was uneventful. On histopathological examination, there were thin walled endothelial linings with lymphatic spaces. Lymphatic tissues were abundant with few smooth muscles suggestive of lymphangioma (Figure 3, 4). After 14 months of follow up, there was no recurrence and he was doing well.

## DISCUSSION

Lymphangioma occurs due to obstruction of lymphatic channels during development of primitive lymph sacs.<sup>1</sup> It is common in those areas where lymph sacs are developed. Almost 95% of lymphangiomas occur in head, neck and axilla region. Chest including mediastinum, abdomen and limbs are less common sites. There are few reports of lymphangioma arising from omentum. Exact incidence is not clear. Most of the literatures describe omental lymphangioma, retroperitoneal and mesenteric lymphatic cysts together. Among these cysts, almost one fourth is omental origin.<sup>2,3</sup> Our case had lymphangioma arising from greater omentum. Origin from lesser omentum is extremely rare.<sup>4</sup>

It is congenital in origin but does not manifest in newborn or infantile period. The size keeps increasing as the lymphatic accumulation within it keeps increasing. It may remain asymptomatic for years. Few cases of omental lymphangioma in adults are also reported.<sup>5,6</sup> Clinical symptoms appear because of size, mechanical compression to nearby structures, hemorrhage within it, rupture, infection or torsion.<sup>7,8</sup> Takeda reported a 8 year girl with omental lymphangioma mimicking as mucinous ovarian cyst.<sup>9</sup>

Complicated OL like hemorrhage, rupture, twisting are better visualized by contrast enhanced CT scan. CT scan is necessary to identify the precise extent of lesion and to differentiate from potential malignant lesion.<sup>10,11</sup> Lymphangiomas are benign but locally invasive. Diagnosis of lymphangioma is essential because complete excision is cure. Care should be taken to remove all invaginated loculi completely to achieve complete cure.<sup>12</sup>

## CONCLUSION

Establishing correct preoperative diagnosis in patients presenting with abdominal mass is not always possible. Though rare, omental lymphangioma is a differential diagnosis of abdominal mass. Diagnosis is essential because complete excision of lymphangiomas offers a cure without long term complications.

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