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Case Report

Mysteries Unveiled: Exploring an Uncommon Encounter with Omental Lymphangioma in Adulthood

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ABSTRACT:
Lymphangiomas are uncommon benign lesions resulting from lymphatic system malfunction or inflammation, leading to obstruction. They can emerge at various anatomical sites, with abdominal cases comprising only 5% of all instances, often found in the mesentery, gastrointestinal system, spleen, liver, and occasionally the retroperitoneum. Despite being rare, abdominal lymphangiomas tend to manifest in childhood and exhibit a gender prevalence in boys. While generally benign, they can cause local spread and pose diagnostic challenges due to their varied presentation.
A case report of a 30-year-old female is presented. She had gradually increasing abdominal distension, and imaging revealed a sizable cystic lesion with internal septations in the omental region, likely an Omental Lymphangioma. Surgical excision was undertaken, and histopathological analysis confirmed the diagnosis. Lymphangiomas' origin is still debated, stemming mainly from congenital defects or acquired obstruction.
Imaging plays a pivotal role in diagnosis, although distinguishing lymphangiomas from other cystic lesions remains complex. Treatment involves surgical removal, often complicated by potential local invasion. Recurrence necessitates careful follow-up. The presented case underscores the rarity and diverse clinical aspects of omental lymphangiomas, advocating for thorough evaluation and surgical intervention as the primary treatment strategy.
Keywords: lymphangioma, cystic lesion, imaging, surgical excision

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INTRODUCTION

Lymphangiomas, rare benign lesions, arise from faulty lymphatic system function or inflammation, causing obstructions. While mostly found in the neck (75%) and axillary area (20%), abdominal lymphangiomas (5%) can develop during childhood, more common in boys. Although considered benign, local spreading is possible.[1] Typically asymptomatic, they are often detected incidentally during imaging or surgery, though symptoms like abdominal distension, pain, fatigue, and weight loss can occur if the cyst grows significantly. Rupture, hemorrhage, or twisting might lead to acute abdomen. These cysts, resembling other tumors, are challenging to distinguish via imaging, often requiring surgery or laparoscopy for accurate diagnosis and histopathological correlation.[2]

CASE REPORT

A 30-year-old female presented with gradually increasing abdominal distension and normal bowel and bladder habits. A sonography was performed, revealing a multiseparated encysted collection extending from the subhepatic region to the hypogastrium. Subsequently, a contrast-enhanced CT (CECT) abdomen was conducted, revealing a fairly large (25x18x10 cms, CC x TD x AP) well-defined cystic lesion(Figure-1,2,3).

Figure 1: Contrast-enhanced CT (CECT) abdomen axial and coronal images show a substantial, well-defined cystic lesion measuring approximately 25x18x10 cm (craniocaudal x transverse x anteroposterior), extending from the subhepatic region to the hypogastric region. The lesion appears to extend into the region of the Lesser sac and falciform ligament, closely abutting the anterior margin of the pancreas. Multiple thin internal septations are evident within the lesion, likely indicative of an omental lymphangioma. Differential diagnosis includes encysted collection.

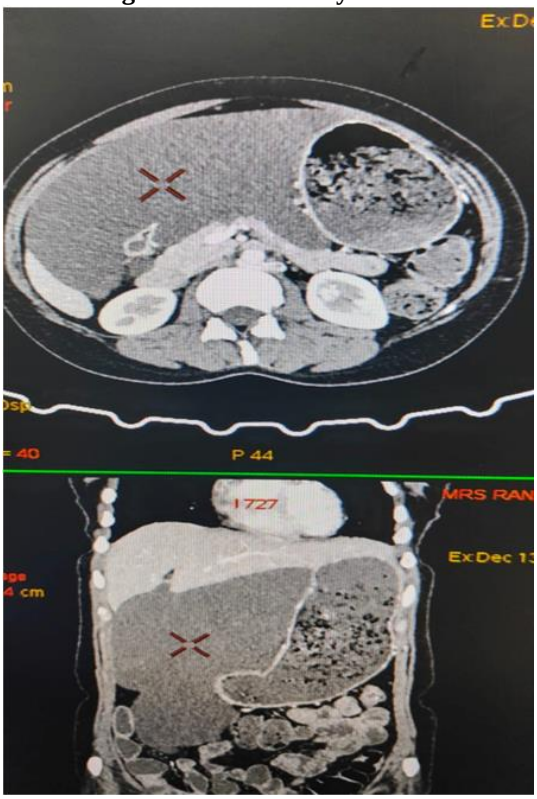


Figure 2: Coronal magnified image of contrast-enhanced CT (CECT) abdomen reveals a considerably large (25x18x10 cm, craniocaudal x transverse x anteroposterior) well-defined cystic lesion. The lesion extends from the subhepatic region to the hypogastric region, extending into the area of the Lesser sac and falciform ligament. It closely abuts the anterior margin of the pancreas. Numerous thin internal septations are observed within the lesion, suggesting a probable diagnosis of omental lymphangioma. Differential diagnosis includes the possibility of an encysted collection.

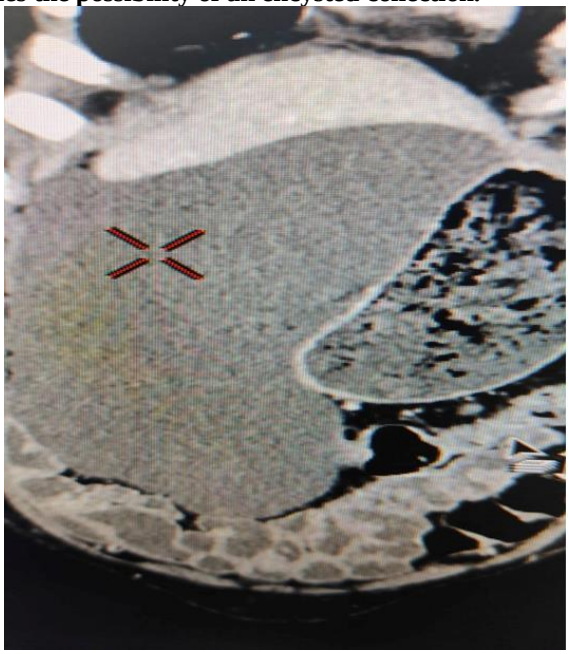
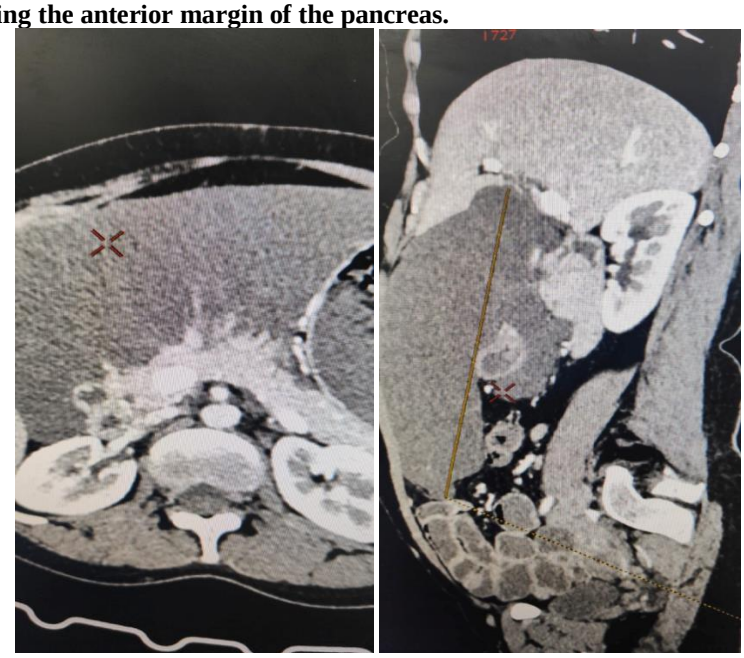


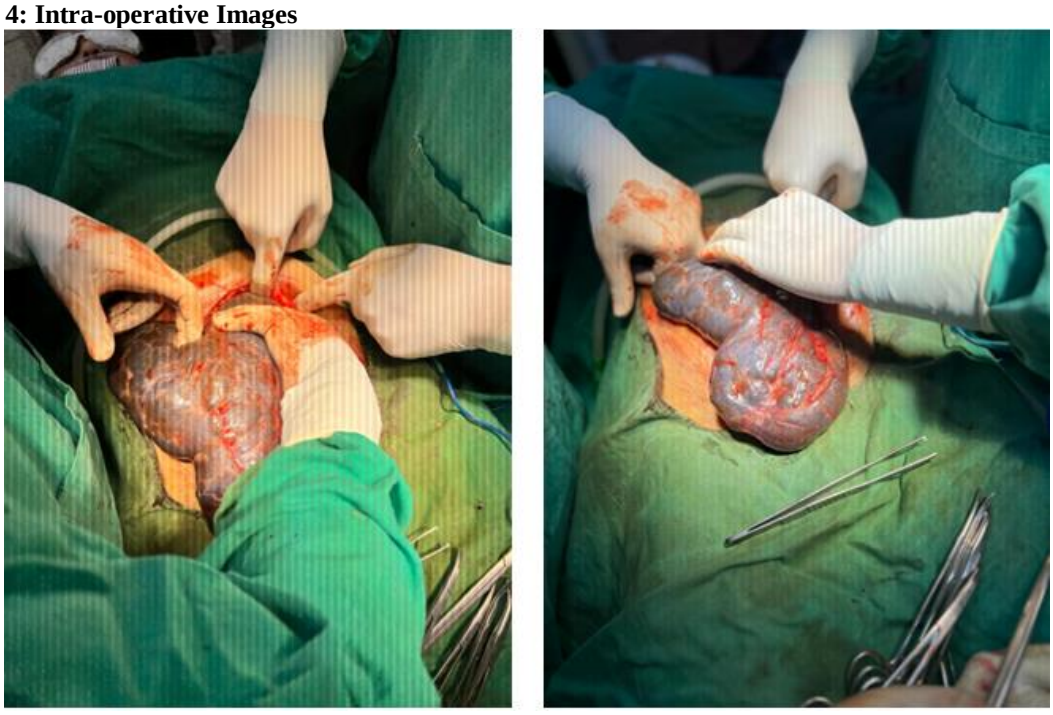
Figure 3: Contrast-enhanced CT (CECT) abdomen axial and sagittal sections depict the extension of the lesion, closely abutting the anterior margin of the pancreas.



This lesion extended from the subhepatic region to the hypogastric region and insinuated into the region of the lesser sac. It closely abutted the anterior margin of the pancreas, with multiple thin internal septations observed within the lesion. These septations were likely indicative of an Omental Lymphangioma, with a differential diagnosis of an encysted collection.

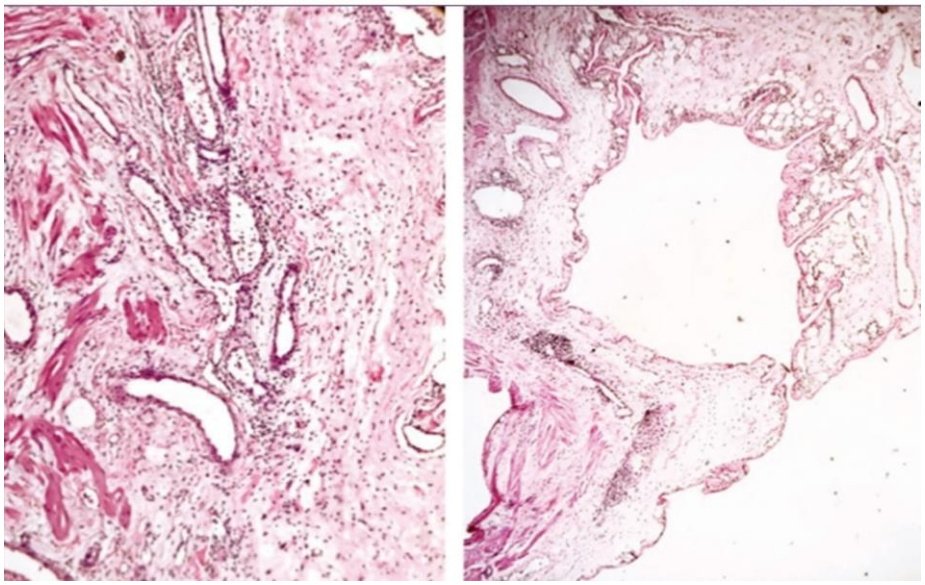
Considering the diagnosis, the chosen treatment approach involved the complete surgical excision of the lesion(Figure-4).

Figure 4: Intra-operative Images



Samples were sent for histopathological analysis. Microscopic examination of the samples revealed the presence of multiple small cysts within the omental fatty tissue. Additionally, areas displaying pancreatic acini, congested capillaries, and focal lymphocytic infiltration were observed. Overall, the morphological features aligned with those characteristic of an Omental Lymphangioma.

Figure 5: Photomicrograph showing numerous expanded cavities covered by flattened epithelial cells with a lymphocytic infiltration (Hematoxylin and Eosin, ×400)



CONCLUSION

Omental lymphangioma represents a relatively rare manifestation of abdominal lymphangiomas, particularly among adults. The recommended treatment approach involves complete excision. Ensuring comprehensive follow-up is essential to detect any potential recurrences.

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