Large retroperitoneal lymphangioma in a young, healthy male: a case report.

Dr. Jessica Chiang, M.D.[a] , Dr. Alexander Hien Vu M.D.[a], Dr. Preeti Kodavanti Farmah, M.D.[a], Dr. Sandeep Sirsi, M.D.[a]
[a] Department of General Surgery, New York University Langone Health

Background

- Lymphangiomas are rare benign tumors typically found in children, and occur most often in the head and neck.[1]
- Lymphangiomas in adults are exceedingly rare, with only 5% occurring intra-abdominally and 1% retroperitoneally.[2,3,4]
- They present with nonspecific findings such as dull pain or swelling, they are difficult to accurately diagnose. They are usually identified after behaving as a lead-point or, mass effect, if growing with development of volvulus or obstruction.[5]
- Ultrasound, CT, and MRI have proven to be the most useful diagnostic imaging modalities. [5-6]

Case Study

This is a 24-year old male who presented to the office after identifying a mass in the right lower quadrant. The mass was increasing in size and became progressively more tender. He found the mass incidentally 8 months prior. Curiously, he described the sensation of “fluid dripping” in his abdomen.

Abdominal ultrasound revealed an 11.9-cm simple intraperitoneal cyst. Follow-up CT abdomen and pelvis with IV contrast demonstrated an 11.2-cm round cystic mass in the right retroperitoneum partially displacing surrounding organs, including the IVC, aorta, and second and third portions of the duodenum.

In the operating room, exploratory laparotomy was performed. A retroperitoneal mass was encountered and its capsule was circumferentially dissected free from surrounding tissue. The mass was then excised with the entire capsule intact. Given that the mass was densely adherent to the duodenum, a single small serosal tear was primarily repaired without any complications. Surgical pathology was consistent with lymphangioma (Figure 3-4). The patient recovered well without clinically evident signs of recurrence post operatively at 2 years.

Lymphangioma

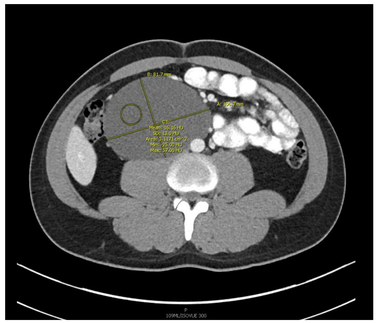


Figure 1. CT abdomen and pelvis with IV contrast (axial) demonstrated an 11.2-cm round cystic mass in the right retroperitoneum partially displacing surrounding organs, including the IVC, aorta, and second and third portions of the duodenum.



Figure 2. Ultrasound (transverse) of 11.9 cm simple-appearing retroperitoneal cyst without identifiable organ of origin.

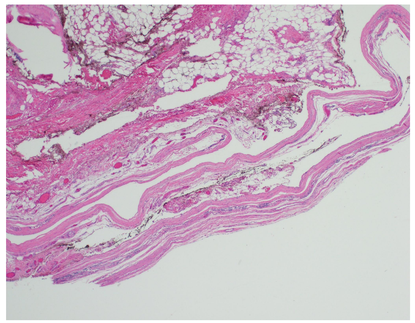


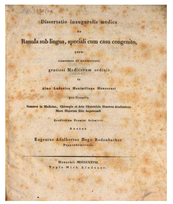
Figure 3. H&E stain of retroperitoneal lymphangioma



Figure 4. Gross specimen of retroperitoneal lymphangioma, shortly after surgical resection

Discussion

While lymphangiomas often present with subtle signs/symptoms, the diagnosis should be suspected if imaging reveals a cystic mass. Surgical resection is the current standard of treatment for lymphangiomas. Laparoscopic and open techniques have both been successful approaches with the principal goal of complete resection to reduce the chance of recurrence.[6] Although the tumors themselves do not have malignant potential, their mass effect has the capability of compromising other structures. Retroperitoneal lymphangiomas should be excised early to prevent serious complications from compression of surrounding structures.



The first description of lymphangioma dates back to Germany 1828, by Dr. Eugen Adalbert Hugo Redenbacher.

References

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Disclosures

The authors declare that they have no relevant or material financial interests that relate to the research described in this poster