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A Unique Case of Cervical Lymphangioma in Adults - A Case Report

Dr. Ahaziah Nicolas U.[1], Ajay Kumar[2]

[1]PG, General Surgery

Abstract: ***Backgrounds: Cervical lymphangiomas are rare, congenital malformations typically diagnosed in childhood. Their manifestations in adulthood is exceedingly uncommon. Case Presentation: In this study, we report a rare case of cervical lymphangioma in a 23-year-old adult, highlighting its atypical presentation and discuss the diagnosis, and clinical, radiological, and operative aspects of it. Conclusion: Cervical lymphangiomas are a rare occurrence in adults. This case emphasis the rarity of its occurrence, and the need for multidisciplinary approach for effective management and optimal patient outcomes.***

Keywords: Cervical lymphangiomas, Adult, rare, Cervical mass, Case report

1. Background

Cervical lymphangiomas are rare, congenital malformations of the lymphatic system, typically presenting in childhood (1, 2). They arise from abnormal lymphatic vessel development during embryogenesis, leading to the formation of lymphatic lesions (3). Adult presentation is exceedingly uncommon, with most cases diagnosed in infancy or early childhood (4, 5). Cervical lymphangiomas in adults often pose diagnostic challenges due to their rarity and nonspecific symptoms, such as a painless neck mass (6). Imaging studies, such as ultrasound and MRI, are essential for diagnosis and treatment planning, helping to differentiate lymphangiomas from other cervical lesions (7, 8). A multidisciplinary approach is crucial for effective management and optimal patient outcomes, involving specialists from surgery, radiology, and pathology (9). Accurate diagnosis and appropriate treatment can significantly improve quality of life for affected individuals**.**

*Correspondence:

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2. Case Presentation

A 23-year-old male, food deliverer by occupation came to general surgery opd with complaints of swelling in left side of neck for past 6 months, which was insidious in onset and progressive in nature. No associated symptoms.

On local examination, a solitary swelling 15x 10 cms over left cervical region, anteriorly from anterior border of clavicle, posteriorly along anterior border of trapezius muscle, laterally 6 cms lateral to midclavicular line, medially 5 cms above the sternal angle and along the border of left side of neck.

On palpation the swelling appeared soft, cystic fluctuant. On auscultation, no significant findings. No swelling elsewhere in the body.

Figure 1: Adult with cervical lymphangioma – Front view

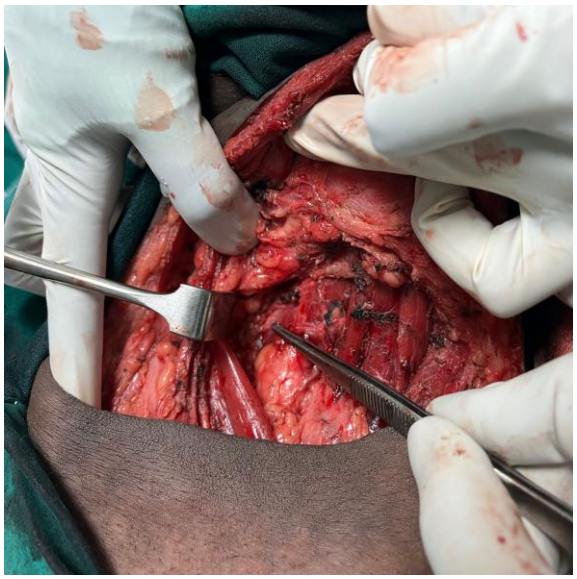

Figure 2

Figure 3

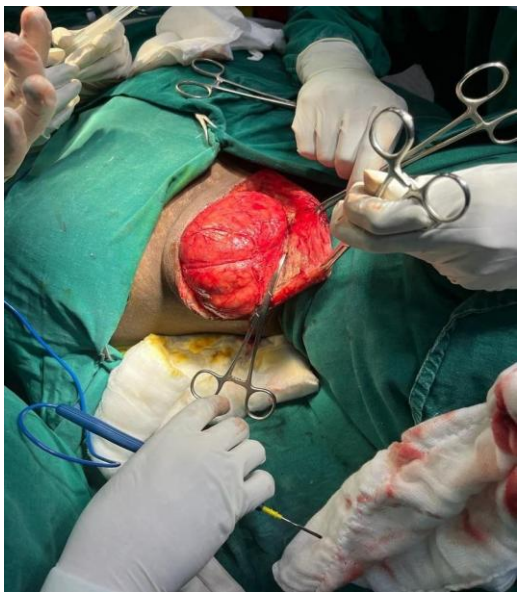

Figure 4

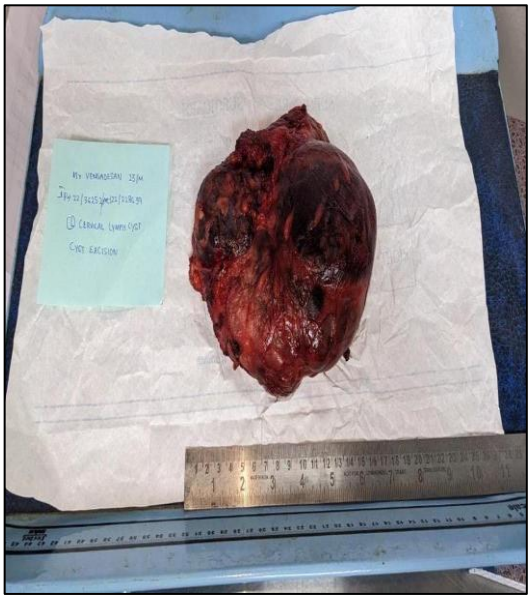

Figure 5: Cervical lymphangioma – Posterior view

Figure 6

3. Discussion

Cystic lymphangiomas are benign congenital lymphatic malformations that are thought to represent developmental abnormalities rather than true neoplasms. The head and neck region are the most common site of occurrence, although cystic lymphangiomas, can present elsewhere in the body including the axilla, mediastinum, groin, and retroperitoneum. More than 80% of lymph cysts present before the age of two. Although, occurrence in adults is rare with only a few cases reported in the literature.

Lymphangiomatous lesions are rare congenital malformations of the lymphatic system that occur throughout the body with greater frequency in the cervicofacial area. A very less number of cases of cystic lymphangiomas have been reported, in the literature, which constitutes to about 67% of all cysts.

All routine blood investigations were within normal limit. Specific investigations were done, which includes,

1) **USG:** It showed cystic lesion with internal echoes in left supraclavicular region of size 9.1 x 8.6 cms, with no abnormality of vasculature.
2) **FNAC:** It showed moderately cellular smear showing predominantly mature lymphocytes, scattered histiocytes in a faint eosinophilic background with possibility of lymph cyst.
3) **MRI:** Neck showed large uniloculated cystic lesion with no solid component measuring 14x13x8cms in left supra clavicular fossa predominantly lying in the subcutaneous plane with no mass effect over adjacent structures
4) **Surgery:** Patient was planned for examination cyst excision under GA. Cyst was excised and sent for Histopathological examination
5) **HPE Report:**
   - GROSS- A Cystic mass of 16x11x15 cms. External surface smooth, and congested. Cut section showed uniloculated cyst and left out 150 ml of blood mixed with serous fluid. Wall thickness -0.3cm inner wall smooth with dilated blood vessels.
   - MICROSCOPY- The section showed cyst wall with flat endothelial cells, sub-epithelium showed fibro-collagenous tissue with dilated and congested vessels

MRI, CT scan, and ultrasonography are all helpful in the diagnosis of a cystic neck mass. The MRI provides detailed images of soft tissues and reveals the connection between the lesion and underlying structures [1]. A contrast can be used to differentiate between hemangiomas and lymphangiomas. CT scans carry a high risk of radiation exposure and can make it challenging to distinguish the mass from surrounding tissue with similar properties [2]. The use of contrast can enhance visualization of the cyst wall and its proximity to nearby blood vessels. Ultra- sonography is the least invasive option and can effectively show the relationship between the cyst and surrounding structures [3]. Thus, it is important to evaluate neck cysts, using a combination of neck CT scan, ultra- sonography, and MRI.

4. Conclusion

This case report enlightens the fact that lymphangiomas of the head and neck are benign neoplasms which are easy to diagnose. They are typically asymptomatic, rarely complicated, and can be mistaken for a cystic neck mass. Henceforth, the differential diagnosis has to be kept in mind even in adult patients, though it is a rare occurrence in adults. This study showed that, in our case, surgical resection may be a safe and effective treatment for cystic lymphangiomas, with minimal risk of complications during the procedure and warrants best clinical outcomes.

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Author Contributions
All authors contributed to the conception, writing, and editing of the case report. All authors agree to be accountable for all aspects of it.

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Not applicable.

Availability of Data and Materials
The datasets generated during and/or analyzed during the current study are available from the corresponding author upon reasonable request. The materials used in this study are available commercially or can be obtained from the authors upon request.

Declarations

Ethics Approval and Consent to Participate
This research was approved by the ethics committee of the institution.

Consent for Publication
Written informed consent was obtained from the patient for publication of this case report and any accompanying images. A copy of the written consent is available for review by the Editor-in-Chief of this journal.

Competing Interests
No potential conflict of interest relevant to this article was reported.

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