



Rare Case of Adult Onset Cervical Cystic Hygroma: A Case Report

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Introduction

Cystic hygroma is a malformation of the lymphatic vessels. They commonly present in younger age group up to 2 years¹. Presentation in adulthood is rare and the cause is uncertain, although trauma and upper respiratory tract infection have both been suggested as possible triggers for². The most common site is posterior triangle of neck around 80% other site are axilla, groin, mediastinum. They are multiseptate and brilliant transilluminant so called hydrocele of neck³.

Case Report

A 51-year-old male presented with a painless cystic swelling in left posterior triangle of neck for last one year. Patient did not give any history of trauma or upper respiratory tract infection during examination cystic swelling 15× 20 cm with brilliant transilluminat. The swelling was non-tender, non fluctuant, brilliantly translucent extending into both anterior and posterior triangle of the neck.



Fig. 1



Fig. 2

A 51-year- man presenting with a large left-sided cervical swellin (Fig. 1) and transillumination (Fig. 2).

Investigations

Ultrasonographic findings- revealed a multilobular cystic swelling that extended from the suboccipital region to the postauricular region.

CECT imaging- findings showed a multilobular cystic mass with a size of 15 × 20 cm extending from the posterior border of the sternocleidom-

astoid muscle to the prevertebral fascia and anterior chest wall up to 2nd intercostals space (Figure 2).

Fine-needle aspiration cytology- demonstrated a cystic lesion, and the diagnosis was lymphangioma.

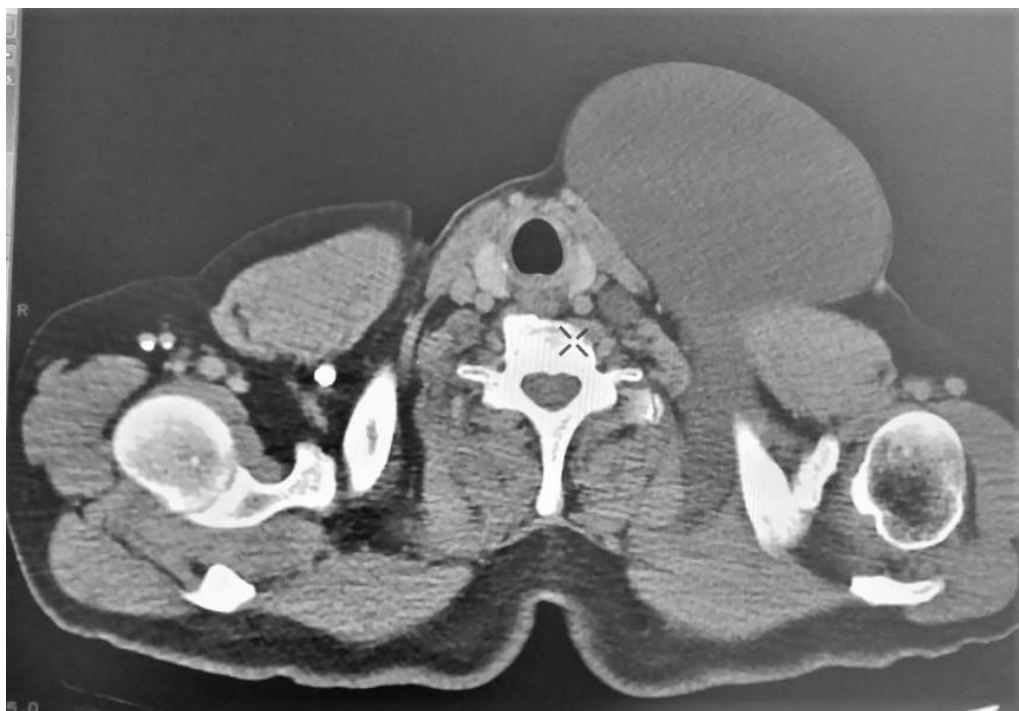


Fig. 2 Axial CECT section of the head and neck showing a large hyperintense mass extending from the level of the posterior border of the the sternocleidomastoid muscle to the prevertebral fascia.

Surgical management

The patient underwent surgical exploration of the left side of neck and excision of the mass via a elliptical incision along the anterior border of the right sternocleidomastoid muscle. The cyst wall densely adherent to sternocleidomastoid muscle and ansa cervicalis. The cyst wall extended up to prevertebral fascia. Due to its wide extension and vital tissue contiguity cyst wall carefully dissected from vital structures but complete excision was not possible. During dissection transverse cervicalis and facial vein were sacrificed. Contents of the cyst leaked intra-operatively towards the final phase of the dissection but near complete removal of the wall of the mass was achieved. Macroscopically the specimen measured approximately 15cm in length. All the important

nerves and arteries encountered during the dissection were seen and try to preserved.

Complete surgical excision of cystic hygroma here was not possible due to anatomical location and extensive infiltration but curate and 5% Povidone-iodine wash done was done of inner lining of remnant part of cystic hygroma. Post operative period remain uneventful. Histological examination revealed cystic spaces lined with flat endothelial-like cells consistent with a diagnosis of cystic hygroma.



Fig. 3



Fig. 4

Intra operative image of cystic hygroma after raising skin flap (Fig.3) dissection and preservation of ansa cervicalis (Fig. 4)

Post-operative period

Post-operatively the patient recovered well with no signs of any neurological or muscular dysfunction there is no significant complain or sign of any recurrence noted during follow up to 6 months.



Fig. 5

Discussion

In this case the patient have cosmetic problem no other complain. En block surgical excision has been considered here. Other treatment option is sclerotherapy⁴, although sclerotherapy is not very effective recurrence is very common, post sclerotherap surgical plane destroyed which makes more difficult surgical excision⁵. In this case, it was thought that the ideal treatment would be complete surgical excision as multiloculated cystic hygroma may not respond to sclerotherapy.

Recurrence is also depend on anatomical location and extension of tumour⁶

Reference

1. Ethunandan M, Mellor TK. Haemangiomas and vascular malformations of the maxillofacial region—a review. *British Journal of Oral and Maxillofacial Surgery*. 2006 Aug 1;44(4):263-72.
2. Al-Dajani N, Wootton SH. Cervical lymphadenitis, suppurative parotitis, thyroiditis, and infected cysts. *Infectious disease clinics of North America*. 2007 Jun 1;21(2):523-41.
3. Koeller KK, Alamo L, Adair CF, Smirniotopoulos JG. From the Archives of the AFIP: Congenital cystic masses of the neck: Radiologic-pathologic correlation. *Radiographics*. 1999 Jan;19(1):121-46.
4. Gaunt M, Tang T, Walsh S. *General Surgery Outpatient Decisions*. Radcliffe Publishing; 2008.
5. Fliegelman LJ, Friedland D, Brandwein M, Rothschild M. Lymphatic malformation: predictive factors for recurrence. *Otolaryngology–Head and Neck Surgery*. 2000 Dec;123(6):706-10.

6. Zhou Q, Zheng JW, Mai HM, Luo QF, Fan XD, Su LX, Wang YA, Qin ZP. Treatment guidelines of lymphatic malformations of the head and neck. Oral oncology. 2011 Dec 1;47(12):1105-9.