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 years[1]. Presentation in adulthood is rare and the cause is uncertain, although trauma and upper respiratory tract infection have both been suggested as possible triggers for[2]. 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 neck[3].

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 transillumination. The swelling was nontender, non fluctuant, brilliantly translucent extending into both anterior and posterior triangle of the neck.

Fig. 1
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 sternocleidomastoid muscle to the prevertiberal 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 sternocleidomastoid muscle to the prevertiberal facia.](image)

**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 prevertiberal 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 15 cm 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.
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.

Recurrence is also depend on anatomical location and extension of tumour

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

**Reference**