



## A RARE CASE OF RECURRENT THYROGLOSSAL DUCT CYST -A CASE REPORT

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**ABSTRACT**

**Introduction-** A thyroglossal duct cyst is a congenital malformation in the neck. Surgical management is often recommended due to risk of recurrent infections, and rare possibility of malignancy **Case Report-**

Here, we describe the case of a 28 year old male who presented with midline neck swelling. He had history of previous surgical excision of his thyroglossal duct cyst, 8 years ago. On examination and evaluation, he was found to have a recurrent thyroglossal duct cyst. **Conclusion-** In patients who underwent previous surgical intervention to remove thyroglossal duct cyst, recurrence should remain a diagnostic consideration

**KEYWORDS :****CASE REPORT**

A 27 year old male presented with complaint of midline swelling in neck since 8months. No history of fever, sore throat, pain, discharge from swelling, change in voice, hoarseness of voice, dysphagia, odynophagia. Patient had past history of thyroglossal duct cyst excision 8years ago.

On clinical examination, A solitary horizontally ovoid swelling noted in upper midline of neck measuring approximately 6\*4cm, cystic consistency, smooth surface, defined margins, moving with deglutition and protrusion of tongue no local rise of temperature, non Tender, skin pinchable Fluctuation +, transillumination +

**Investigations**

Hb - 10.5 g/dl

Wbc -9000 cells /mm<sup>3</sup>

Platelets -2 lakh/mm<sup>3</sup>

USG neck - a well defined midline cystic lesion with thick wall and internal echoes measuring 42\*21mm seen in suprahyoid region with peripheral vascular .Likely THYROGLOSSAL CYST

CT NECK - well defined hypodense cystic lesion measuring 55\*29mm noted in midline in anterior aspect of neck likely THYROGLOSSAL DUCT CYST

FNAC OF SWELLING NECK – cystic lesion likely Thyroglossal duct cyst

INDIRECT LARYNGOSCOPY – normal study

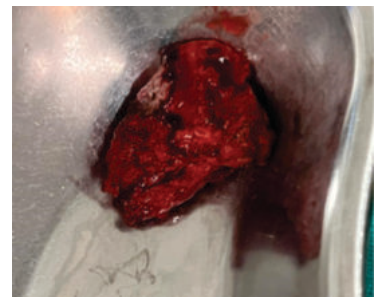
Given the history, examination ,radiological and cytological findings the diagnosis of recurrent thyroglossal duct cyst was made .After preoperative work up Surgical management was done where in surgical excision of thyroglossal duct cyst along with its tract done up to foramen cecum. No evidence of central portion of hyoid bone noted in trapper actively. Post op stay uneventful



**Clinical Picture Of Thyroglossal Duct Cyst, With Previous Surgical Scar**



**Intraoperative Picture Of Thyroglossal Duct Cyst**



**Specimen Of Thyroglossal Duct Cyst**

**DISCUSSION**

The differential diagnosis of neck swellings include Thyroglossal duct cyst, thyroid enlargement, Sub hyoid bursitis, lymphadenopathy, infectious etiologies, Oncologic processes and various other cysts

Majority of thyroglossal duct cyst as mentioned earlier will present in childhood, 50% before the age of 20 years. Infrequently primary occurrence can also present in adulthood with even distribution in males and females .Majority of initial presentations are asymptomatic but sometimes may be complicated by infection / fistula formation(11). Such patients present with throat pain, dysphagia, odynophagia, voice change, tender neck swelling, fever. Thyroglossal duct cyst recurrences are attributed to the incomplete excision of thyroglossal tract and its branching ductules. The earlier in childhood the excision is performed higher the rate of recurrence ,the residual tract is present postoperatively due to variable histology or a limited surgical resection. Histologically the thyroglossal duct can

have multiple ductules extending from main ventral duct which may not be detected intraoperatively complicating the initial management and increasing the risk of recurrence due to residual thyroglossal tract which might be the probable cause in this case. SISTRUNK procedure is the gold standard surgery where in enbloc resection of the cyst and thyroglossal tract with superior excision encompassing the central aspect of hyoid bone and continuing upto Foramen caecum without breaching oral mucosa(5). Recurrence after SISTRUNK is between 3-10 % (6,7,8). A wide anterior neck dissection excising the central compartment between lateral borders of sternohyoid muscles has been performed in adults with recurrent thyroglossal duct cyst demonstrating good outcome with minimal morbidity (10). Majority of the patients recur within first postoperative year (9). Diagnosis can be challenging and requires imaging to further characterize. Definite management of recurrent thyroglossal duct cyst remains surgical excision.

## CONCLUSION

Recurrence of thyroglossal duct is seen in about 3-10% of patients who underwent previous surgical intervention. Therefore in the adult population it is important to include thyroglossal duct cyst as part of differential diagnosis despite removal in childhood.

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