

UNUSUAL SUPRAGLOTTIC LESION

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ABSTRACT

BACKGROUND

An unusual supraglottic lesion was noted in a middle aged man of 38 years. The patient was from Sudan. He presented with a symptom of "change in voice" from the past 6 months.

KEYWORDS

ENT, Supraglottis, Surgery, Lesion, Voice.

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BACKGROUND

The upper margin of the supraglottic larynx extends along the free edge of the epiglottis and aryepiglottic folds down to the arytenoid cartilages. The external or outer contour of the supraglottic larynx from cranially to caudally is the hyoid bone, the thyrohyoid membrane, and the thyroid cartilage. The intralaryngeal caudal margin of the supraglottic larynx is defined by a horizontal plane that extends through the mid-point of each laryngeal ventricle. Thus, the upper mucosal surface of the ventricle is in the supraglottic larynx, while the lower surface is in the glottic larynx. In the axial plane, between the mucosa covering the supraglottic larynx and the external contour of the larynx described above, is a somewhat "horseshoe-shaped" space filled with fat, lymphatic capillaries, and a rich vascular capillary network. This space is indented posteriorly on each side by the anterior part of each pyriform sinus recess of the hypopharynx (Fig. 1).^[1,2,3,4] Anatomically, the space is divided by fascia into a midline pre-epiglottic space and a paraglottic space on each side.^[5, 6] The hyoepiglottic ligament, which extends from the dorsal hyoid body to the ventral surface of the epiglottis, is often considered the roof of the supraglottic larynx in the anterior midline, ventral to the epiglottis (Fig. 2).



Figure 1 [7, 8, 9]



Figure 2

CASE REPORT

A 38-year-old Sudanese male presented with a symptom of "change in voice" observed from the past 6 months.

Change of voice, "Hot Potato voice" was gradual in onset and progressive in course.

- Mild Dyspnoea.
- No cough, No Dysphagia.
- Condition was not preceded or accompanied with Fever, Trauma or RTI.
- No haemoptysis or external laryngeal swellings.
- No ear pain at rest or during swallowing.
- No nasal obstruction or neck swellings.

Examination

Nose & Ears

- Within normal limits.

Neck Examination

- Laryngeal click was preserved.
- No palpable neck nodes.

ENT Examination

- Disturbed anatomy of the epiglottis.
- Laryngeal Endoscopy with 70-degree rigid telescope.

Endoscopic Examination

- Epiglottis was pushed to left side by embedded lesion in Rt. Supraglottic region.
- Hidden right vocal cord.
- Partially visualised lower 1/3rd of left cord & left arytenoids.

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Normal Larynx



Endoscopic Examination



Radiology

Patient was sent for CT neck with primary diagnosis of Right supraglottic mass, may be a cyst.

Radiology Report

Right supraglottic area shows a well-defined bilocular cystic lesion measuring about 4.4 cm x 3.4 cm, dense calcification inside the lesion. No cervical lymphadenopathy. [10,11,12,13,14,15]

CT Scan



MANAGEMENT

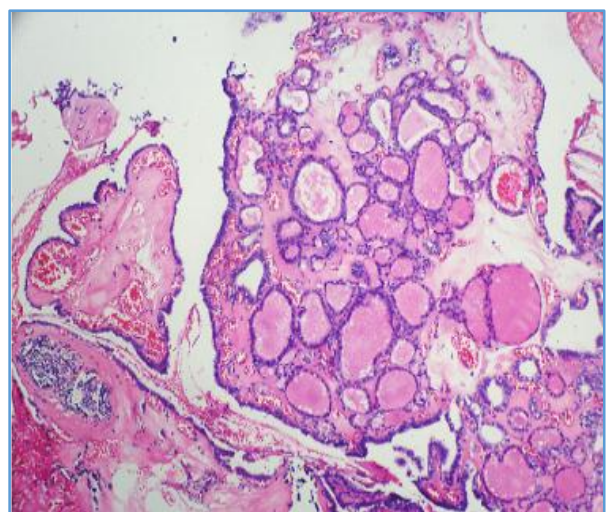
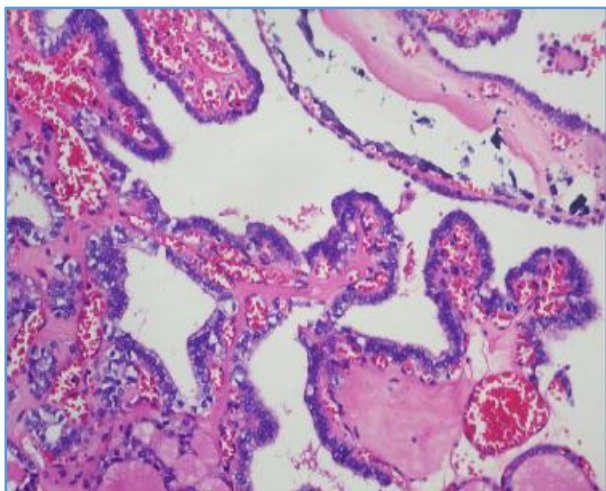
Patient was prepared for Microlaryngeal Surgery.

Operative Steps

- Difficult intubation.
- Microlaryngeal surgery under GA.
- Puncture evacuation of the big cyst.
- Marsupialisation of the big cyst.
- Puncture evacuation of the other cyst.
- Approaching the smaller cyst through the other cyst.
- Removal of the cystic wall.

HISTOPATHOLOGY

Histopathology report showed Ectopic Thyroid Tissue with Papillary Carcinoma, Classic Variant. [16,17,18, 19, 20]



Followup Endoscopic Examination-



Pre-operative Vs. 8 weeks Post-operative view



Post-Operative Examination



- Patient regained normal voice.
- Complete disappearance of patient complaint.
- Normal anatomy of the supraglottis as well as the glottis can be seen clearly now.
- No fullness at the tongue base.

DISCUSSION

Patients with supraglottic lesion can have symptoms ranging from change of voice to loss of voice. "Hot Potato voice" can be gradual in onset and progressive in course. A thorough workup of the case can lead to a better outcome for the patient.

As mentioned in this case report, microlaryngeal surgery can provide a better outcome for the patient.

CONCLUSION

Not many cases have been reported with this pathology. A thorough workup and microlaryngeal surgery can provide positive outcomes to patients with such kind of lesions.

REFERENCES

- [1] Brandwein M, Kapadia S, Gnepp D. Nonsquamous pathology of the larynx, hypopharynx, and trachea. In: Gnepp D. Diagnostic surgical pathology of the head and neck. Philadelphia: W.B Saunders Company 2001:239-323.
- [2] Curtin H. The larynx. In: Mosby, Som PM, Curtin HD, (edr). 4th edn. Head and neck imaging. St. Louis 2003;2:1595-699.
- [3] Rosen FS, Pou AM, Quinn FB. Obstructive supraglottic schwannoma: a case report and review of the literature. Laryngoscope 2002;112(6):997-1002.

- [4] Nakahira M, Nakatani H, Sawada S, et al. Neurofibroma of the larynx in neurofibromatosis: preoperative computed tomography and magnetic resonance imaging. *Arch Otolaryngol Head Neck Surg* 2001;127(3):325-8.
- [5] Berman J. Surgical anatomy of the larynx. In: Bailey B, Biller H, (eds). *Surgery of the larynx*. Philadelphia: W.B Saunders Company 1985.
- [6] Larynx BL. Gray's textbook of anatomy. In: Williams PD, Bannister L, Berry M, (eds). 38th edn. London: Churchill Livingstone 1995:1637-52.
- [7] Lawson W, Biller H. Supraglottic cancer. In: Bailey B, Biller H, (eds). *Surgery of the larynx*. Philadelphia: W.B Saunders Company 1985:243-55.
- [8] Foer BD, Hermans R, Goten VDA, et al. Imaging features in 35 cases of submucosal laryngeal mass lesions. *Eur Radiol* 1996;6(6):913-9.
- [9] Saleh EM, Mancuso AA, Stringer SP. CT of submucosal and occult laryngeal masses. *J Comput Assist Tomogr* 1992;16(1):87-93.
- [10] Ishii T, Nitta M, Masaki T, et al. A case of multiple neurofibroma of the larynx and cervical esophagus. *Acta Otolaryngol Suppl* 2002;547:54-6.
- [11] Plantet MM, Hagay C, De Maulmont C, et al. Laryngeal schwannomas. *Eur J Radiol* 1995;21(1):61-6.
- [12] Shpitzer T, Noyek AM, Witterick I, et al. Noncutaneous cavernous hemangiomas of the head and neck. *Am J Otolaryngol* 1997;18(6):367-74.
- [13] Mills SE. Neuroectodermal neoplasms of the head and neck with emphasis on neuroendocrine carcinomas. *Mod Pathol* 2002;15(3):264-78.
- [14] Takayama F, Takashima S, Momose M, et al. MR imaging of primary malignant lymphoma in the larynx. *Eur Radiol* 2001;11(6):1079-82.
- [15] Ferretti GR, Calaque O, Reyt E, et al. CT findings in a case of laryngeal sarcoidosis. *Eur Radiol* 2002;12(4):739-41.
- [16] Barnes L. Diseases of the larynx, hypopharynx, and esophagus. 2nd edn. *Surgical pathology of the head and neck*. Vol: 1. New York: Marcel Dekker 2000:127-237.
- [17] Silver C. Pathology of laryngeal tumors. *Surgery for cancer of the larynx and related structures*. New York: Churchill Livingstone 1981:25-38.
- [18] Cohen J, Guillaumondegui OM, Batsakis JG, et al. Cancer of the minor salivary glands of the larynx. *Am J Surg* 1985;150(4):513-8.
- [19] Sakamoto M, Ishizawa M, Kitahara N. Polypoid type of laryngeal sarcoidosis-case report and review of the literature. *Eur Arch Otorhinolaryngol* 2000;257(8): 436-8.
- [20] Cankaya H, Egeli E, Unal O, et al. Laryngeal amyloidosis: a rare cause of laryngocele. *Clin Imaging* 2002; 26(2):86-8.