

## CASE REPORT

# A RARE PRESENTATION OF CYST IN HYPOPHARYNX

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## ABSTRACT

We present a 3.5 years old female child with 14 X 12 mm exophytic well defined lobulated soft tissue lesion in the epiglottis in the right side discovered upon endoscopic evaluation for stridor and dyspnea. CT scan was requested and revealed only benign features. Subsequent excision revealed a benign lesion. However multiple additional D/DS were considered preoperatively

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## INTRODUCTION

When an epiglottic lesion is seen on laryngoscopy, the treatment plan may include operative or non-operative options depending on the patient's symptoms and the size of the lesion<sup>1,2</sup>. Hypopharyngeal / Epiglottic cysts can present with hoarseness of voice, difficulty in swallowing, odynophagia, globus pharyngicus and difficulty in breathing<sup>3,4</sup>. When an epiglottic lesion is seen on laryngoscopy, the treatment plan may include operative or non-operative options depending on the patient's symptom and the size of lesion<sup>5</sup>. Cross-sectional Imaging by CT or MRI tends to be reserved for clinically malignant or possibly malignant lesions in order to further characterize the process and extent of involvement<sup>6,7</sup>.

## CASE REPORT

A 3.5 years old female child was referred from Afghanistan on 12th December 2018 to the ENT out patients department. she had 6 months history of dyspnea and stridor. Upper endoscopy revealed well defined lobulated soft tissue lesion in the epiglottis on the Right side CT scan was advised, which was revealing well defined lobulated soft tissue mass in epiglottic area on the right side/ Figure 1 and 2. Surgery was planned for the patient but initially she had chest infection for that intravenous 2nd generation antibiotic was given in the ward for a period of 6 days. After informed consent from the father for anesthesia

and surgery risks, the patient was shifted to the ENT operation theatre. The Direct laryngoscopy was performed with endotracheal tube intubation. we found a soft lobulated mass arising from the right side of the epiglottis and occupying the hypopharynx, the airway was slightly compromised. Due to fear of perioperative bleeding and risk of tracheostomy the advanced technology of Harmonic scalpel was used. with the help of harmonic scalpel whole of the cyst was excised along with the pedicle, during the whole procedure minimal amount of blood was lost. The recovery was uneventful and patient was discharged home on 3rd post operative day. The biopsy report showed Epiglottal cyst

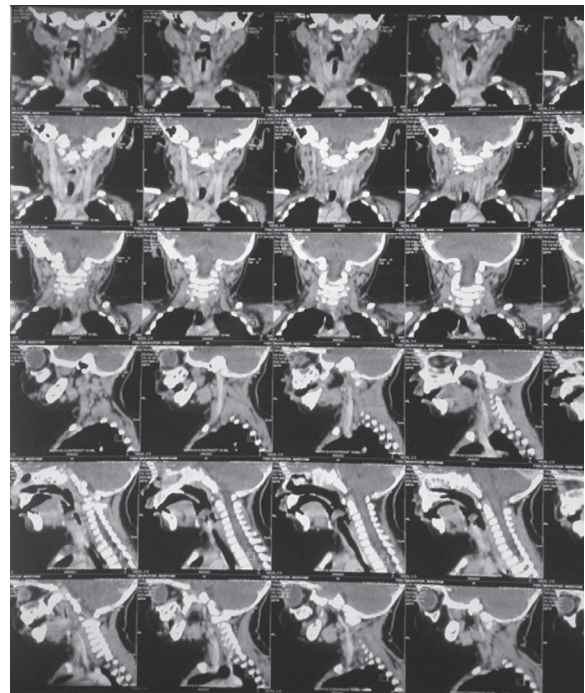


Fig 1: CT Scan findings. Coronal & sagittal view.

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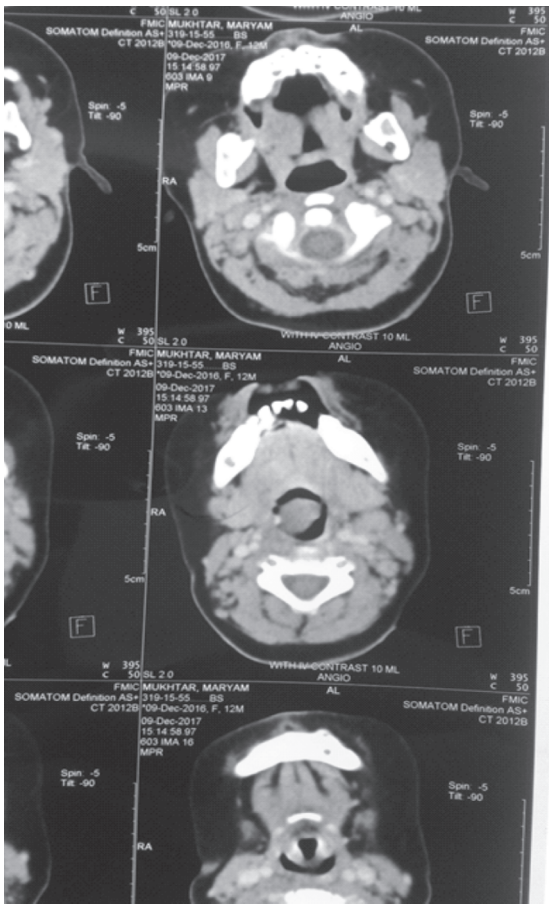


Fig 2: CT scan Axial View

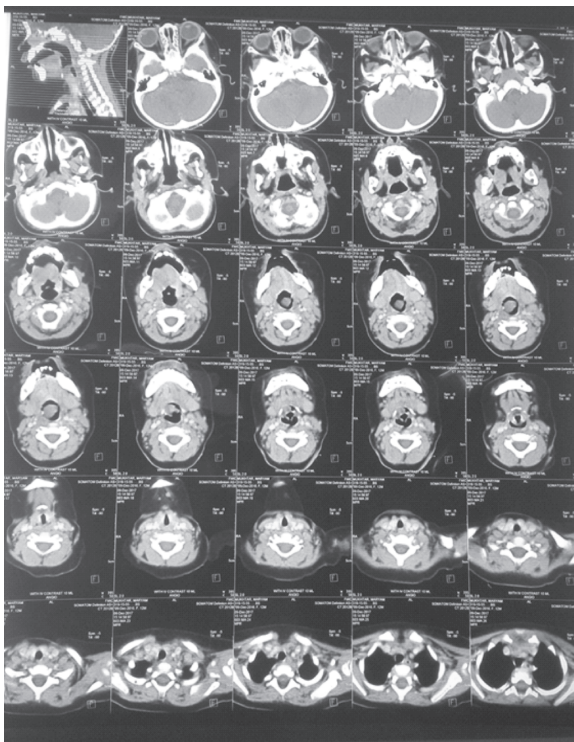


Fig 3: CT scan Head, Neck and Chest

## DISCUSSION

Masses of the epiglottis may be cystic, granulomatous, infectious, neoplastic, or manifestations of a systemic disease<sup>8</sup>. The radiologist may greatly contribute to patient care by being able to narrow the differential diagnosis. Acute epiglottitis is an emergency diagnosis, which is often made on a clinical basis, as patients may present with rapid-onset stridor and dysphagia with a high fever, and clinically appear toxic and may be drooling due to the inability to swallow. CT findings include an enlarged and edematous epiglottis possibly with edema of the entire supraglottic larynx. As we are concerned with the differential diagnosis of epiglottic masses and not diffuse epiglottic thickening, we will not consider etiologies that traditionally involve epiglottic thickening such as radiation treatment or acute epiglottitis. Nevertheless, if an epiglottic mass is identified concurrently with diffuse epiglottic thickening, the radiologist must consider the possibility of a superimposed acute epiglottitis and convey this to the treating physician<sup>9</sup>. Benign neoplastic and non-neoplastic proliferations can present as an epiglottic mass. Benign squamous papillomas are noninvasive and slow-growing epithelial tumors that tend to form fine papillary, well-defined masses that may be pedunculated. While often arising from the soft palate, tonsils, or pharyngeal wall, laryngeal involvement is common and may produce symptoms when the epiglottis is involved. Squamous papillomas tend to be exophytic with multiple papillary fronds, covered by mature stratified squamous epithelium<sup>15</sup>. It has been known for nearly three decades that the human papilloma virus (HPV) is linked to the development of squamous papilloma and to the risk of developing laryngeal squamous cell carcinoma. Fibroepithelial polyps, although noninvasive like papillomas, are composed of a larger solid fibrous core rather than multiple fine papilla and lack squamous epithelial overgrowth. On MRI, they tend to be T2 hyperintense, mildly T1 hyperintense, without enhancement after gadolinium contrast administration.

Laryngeal cysts comprise 5% of all benign laryngeal lesions, and the majority of ductal cysts arise from the epiglottis. Takwoingi YM et al described a 64-year-old female with progressive stridor and foreign body sensation who had a 2.5 cm × 1.8 cm epiglottic cyst seen on CT as a low-density structure attached to the lingual surface of the epiglottis<sup>10</sup>. The authors warn that epiglottic cysts may become secondarily infected and present with epiglottitis, which may demonstrate ring enhancement on post-contrast CT scan. They further caution that abscess must not be mistaken for a small amount of normal air that may be present within an epiglottic cyst Tong MC et al and Yoon TM. presented

a 43-year-old male and 54 years male respectively with progressive dysphagia and hoarseness whom presented with airway obstruction from a large epiglottic cyst<sup>11,12</sup>.

### CONCLUSION

Epiglottic masses are more often seen clinically by the otolaryngologist than by the radiologist on CT or MRI, as most patients will not undergo imaging of benign-appearing epiglottic masses. Nevertheless, the radiologist must be vigilant for their presence and aware of the differential diagnosis, as epiglottic masses may simply be incidental findings without symptoms, as in our patient, or they may present with airway obstruction.

### REFERENCES

1. Moloy PJ, Charter R. The globus symptom. Incidence, therapeutic response, and age and sex relationships. *Arch Otolaryngol* 1982; 108: 740-4.
2. Lee BE, Kim GH. Globus pharyngeus: a review of its etiology, diagnosis and treatment. *World J Gastroenterol* 2012; 18: 2462-71.
3. Agada FO, Coatesworth AP, Grace AR. Retroverted epiglottis presenting as a variant of globus pharyngeus. *J Laryngol Otol* 2007; 121: 390-2.
4. Kawasaki H, Kuratomi K, Mitsumasu T. Cysts of the larynx. A 10- year review of 94 patients. *J Laryngol Otol* 1983; 10 Suppl: S47-5.
5. Hollinger PH, Johnston KC. Benign tumors of the larynx. *Ann Otol Rhinol Laryngol* 1951; 60: 496-13. [CrossRef ]
6. Su CY, Hsu JL. Transoral laser marsupialization of epiglottic cysts. *Laryngoscope* 2007; 117: 1153-4.
7. Fang TJ, Cheng KS, Li HY. A huge epiglottic cyst causing obstruction in an adult. *Chang Gung Med J* 2002; 25: 275-8.
8. Kariya N, Nishi S, Minami W, et al. Airway problems related to laryngeal mask airway use associated with an undiagnosed epiglottic cyst. *Anaesth Intensive Care* 2004; 32: 268-70.
9. Tsikoudas A, Ghuman N, Riad MA. Globus sensation as early presentation of hypopharyngeal cancer. *Clin Otolaryngol* 2007; 32: 452-6
10. Takwoingi YM, Kale US, Morgan DW. Rigid endoscopy in globus pharyngeus: how valuable is it? *J Laryngol Otol* 2006; 120: 42-4
11. Tong MC, Gao H, Lin JS, Ng LK, Chan HS, Ng SK. One stop evaluation of globus pharyngeus symptoms with transnasalesophagoscopy and swallowing function test. *J Otolaryngol Head Neck Surg* 2012; 41: 46-4.
12. Yoon TM, Choi JO, Lim SC, Lee JK. The incidence of epiglottic cysts in a cohort of adults with acute epiglottitis. *Clin Otolaryngol* 2010; 35: 18-6.