



INTERMITTENT LUMP IN THE NECK-LARYNGOCELE, AN UNUSUAL PRESENTATION

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ABSTRACT Laryngocele is a rare condition characterized by cystic dilatation of laryngeal saccule. It may be asymptomatic in a majority of patients. It could present with neck swelling, hoarseness, cough reflex, and stridor. It is classified into internal, external and mixed type. This is a report of a case of mixed laryngocele diagnosed by CT scan in a patient referred for investigation with a history of palpable cervical mass in cervical region apparent only in the presence of an infection. This case report is made to create awareness with regard to diagnosis and management of a laryngocele.

KEYWORDS : Laryngocele , Infection, Midline Swelling

INTRODUCTION

Neck Swelling is a common problem seen in the urgent care setting. Such swellings are mostly thyroid swellings, enlarged lymph node, thyroglossal cyst, lipoma, dermoid cyst, Ludwig's Angina. The incidence of laryngocele is 1 in 2.5 million population, occurring seven times more frequently in males than females, mostly in the sixth decade of life.(1)

CASE REPORT

A 72yr old male patient presented with a history of painless swelling in the upper right side of the neck 3 years ago. During the 1st episode, the swelling subsided with conservative treatment. The 2nd episode began 1 month ago, when the patient presented to us in the ENT out-patient department.

PRE MEDICATION PHASE-There were no complaints of odynophagia, dysphagia or change in voice. The swelling was apparent only when infected. Coughing and straining entraps air within the saccule . Otorhinolaryngological examination revealed a non tender soft and reducible swelling on the right side of the neck-Level 2A. The swelling was 1cm below the inferior border of the mandible,3cms from the midline,4cms from the right sternocleidomastoid muscle laterally, and 5cms above the right clavicle. The Indirect Laryngoscopic examination was normal .



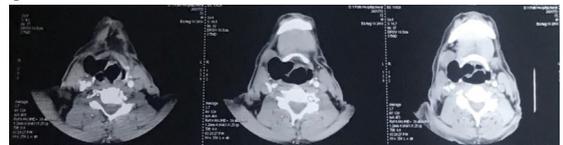
The patient was investigated and his hematological examination and Xray chest were normal. His USG Neck showed a few subcentimetric non-necrotic lymph nodes in the right cervical region level 2A ,largest measuring 1.3 X 0.7cm.

We advised a CT neck (P+C), which showed- A well defined thin walled air attenuated lesion, noted in the right paraglottic space. It is communicating with the right laryngeal ventricle. It is extending

through the thyrohyoid membrane into the extra laryngeal space. No fluid component is noted within the lesion. The lesion measures 3.4 x 3.5 x 4.6cm.

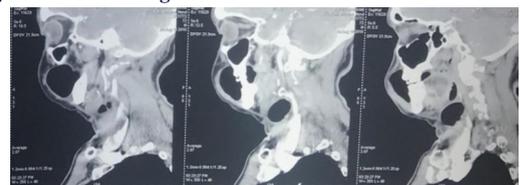
Similar smaller lesion is seen on the left side without extension into the extra laryngeal space. It measures 1.6 x 0.8 x 3.7 cm

Figure 1. CT Neck Axial View



Lesion noted in Right paraglottic space suggestive of laryngocele

Figure 2. CT Neck Sagittal View



Lesion noted in Right paraglottic space suggestive of laryngocele

MEDICATION PHASE- The patient was prescribed Antibiotics, Analgesics, Mouth Gargles.The swelling started reducing in size during medication phase. But the swelling was still visible during Valsalva maneuver in the upper one third of the right side of the neck.

POST MEDICATION PHASE- Patient improved after the medication phase.

DISCUSSION

Laryngoceles can be congenital or acquired and occur at any age.

The etiology of the laryngocele is unknown but there are few predisposing factors which are associated with their development. Increased intra-laryngeal pressure may be brought about by modified Valsalva maneuver, involving a strain which requires fixing the diaphragm in forced expiration against closed larynx resulting in

increased glottis and ventricular pressure (3). This mechanism causes increased ventricular pressure in wind instrument players (3,4,5)

Supra-glottic carcinoma is the most common laryngeal carcinoma and is found to be associated with laryngocele in few cases (6). It may result in a valve like closure at the neck of the ventricular appendage, which allows the inward movement of air but prevents its exit. Therefore, a carcinoma must be ruled out if a laryngocele is detected clinically or radiologically (7,8,9)

A laryngocele commonly presents with dysphonia or a swelling in the neck which typically becomes prominent during Valsalva maneuver (5,10).

Internal laryngocele presents with hoarseness of voice, dyspnoea and foreign body sensation in throat (4,10). External laryngocele presents as a mass evident in the lateral aspect of the neck, which is round or ovoid, soft, elastic, moveable, painless and covered by a normal skin (4,10).

Mixed laryngocele produces the subjective symptoms of internal laryngocele and the objective signs of an external laryngocele (10). The passage of air from the external to the internal part of the sac results in sudden enlargement of internal component of laryngocele and it may cause acute upper airway obstruction (10,11).

The diagnosis of laryngocele is essentially clinical. Plain X-rays Antero-posterior and lateral view are useful during the Valsalva maneuver. Ultrasound examination of neck assists in making diagnosis. Computed tomography provides a cross-sectional image and superior contrast resolution. This has replaced many conventional techniques and has become the initial radiographic method of evaluating the larynx and neck. Uncomplicated laryngocele appears on CT as an air filled structure lying in the para-laryngeal space (internal), lateral neck (external) or in both locations (mixed) (12,13). Magnetic resonance imaging, because of its multi-planner capability provides high definition of soft tissues, offers detailed information on the boundaries of the air-filled sac and, is useful when laryngo-mucocoele or laryngopyocoele are suspected (12,13,14). MRI is also helpful to distinguish between inflammation and neoplastic disease.

Differential diagnosis of laryngocele includes, saccular cyst, branchial cyst, neck abscess and lymphadenopathy.

Our patient's symptoms were evident only due to an infection. There was improvement with medication without the need for surgery.

CONCLUSION

A Laryngocele is an abnormal dilatation of the laryngeal ventricle and saccule secondary to pressure changes as a result of inflammation or neoplasia. In our case an infection rendered the swelling its prominence. This article helps to create awareness with regard to the etiology which resolved with conservative management.

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