

## Mixed Laryngocele

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**Abstract:** Laryngocele alludes to dilatation of the sacculle of the laryngeal ventricle. It is a rare disease. There are different types, external, internal and mixed. Laryngoceles are more frequently obtained instead of inherent. They are lined by pseudostratified, columnar, ciliated epithelium. Intermittent locales of stratified squamous epithelium (submucosal serous and mucous organs) may be shown. This report describes a 29-year-old Libyan male who had been suffering from left neck swelling for more than 5 years. Over the last months, he had been suffering from the increased size of the swelling but no other clinical symptoms. Linear ultrasound is quite difficult in these cases. A computed tomography scan is the foremost compelling imaging strategy for diagnosis. CT scan helps in deciding the nature, location and sort of laryngocele, and laryngeal structures. other than the follow-up, Surgery is the treatment of choice. Follow up after one year, no recurrence detected.

**Keywords:** Larynx, laryngocele, computed tomography scan, Magnetic resonance imaging, supraglottic squamous cell carcinoma.

## القيلة الحنجرية المختلطة

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**المستخلص:** تشير القيلة الحنجرية إلى توسع كيس البطين الحنجري. وهو مرض نادر الحدوث وتوجد منه أنواع مختلفة داخلي وخارجي ومختلط. عادة ما يتم اكتساب القيلة الحنجرية وليس خلقية. تصطف بواسطة ظهارة كاذبة، عمودية، مهدبة. أحيانا مناطق عرضية من الظهارة الحرشفية الطبقيية (الغدد المخاطية والمصليية تحت المخاطية) قد تكون موجودة. يصف هذا التقرير رجلاً ليبيًا يبلغ من العمر 29 عامًا كان يعاني من تورم في الرقبة اليسرى لأكثر من 5 سنوات. خلال الأشهر الماضية، كان يعاني من زيادة حجم التورم ولكن لا توجد أعراض سريرية أخرى. والتصوير بالموجات فوق صوتية بالكاد يكون صعبا في مثل هذه الحالات. يعد التصوير المقطعي هو أكثر طرق التصوير فعالية للتشخيص. يساعد التصوير المقطعي المحوسب في تحديد طبيعة وموقع ونوع القيلة الحنجرية وبنية الحنجرة. إلى جانب المتابعة، الجراحة هي العلاج المفضل. المتابعة بعد عام واحد، ولم يتم الكشف عن تكرار.

**الكلمات المفتاحية:** الحنجرة، القيلة الحنجرية، التصوير المقطعي المحوسب، التصوير بالرنين المغناطيسي لسرطان الخلايا الحرشفية فوق المزمار.

## Introduction

Laryngocele may well be a rare, benign dilatation of the laryngeal saccule which will expand inside into the airway or remotely through the thyrohyoid layer. Numerous laryngoceles are asymptomatic; a few of the time they may cause a cough, roughness, stridor, sore throat and may appear as a swelling on one or both sides of the neck. Laryngocele may be related to supraglottic squamous cell carcinoma. A computed tomography check is the foremost compelling imaging strategy for determination. Surgery is the treatment of choice[1].

Laryngocele is usually unilateral .it is rare bilateral but it is reported.no sex difference in occurrence. It occurs in middle and old age[2].

*Three laryngocele subtypes are depicted :*

1. internal (or basic): the widened ventricular saccule is restricted to the paralaryngeal space; it is contained by the thyrohyoid layer (~40%),
2. external: the saccule herniates through the thyrohyoid film, and the shallow parcel is widened (~25%).
3. mixed: with expanded inside and outside components (~45%)[2].

## Risk factors

Raised intralaryngeal weight secondary to: excessive cough, playing woodwind/brass disobedient, glass blowing, discouraging injury, e.g. a tumor.

The finding of a laryngocele ought to incite a hunt for an basic laryngeal carcinoma discouraging the hole of the laryngeal ventricle 2. Secondary laryngocele is the term utilized when a tumor is the cause of a laryngocele [2].

Laryngopyocele is a rare complication of laryngocele, although both of them are rare[3].

## Case report

A 29-year-old Libyan male had been enduring from left neck swelling for more than 5 years. Over the last months, he had been enduring from the increased size of the swelling but no other clinical symptoms.

On examination, he was found to have a painless delicate mass at the left side of the neck, around 6 cm in measure, conducting vibration amid a discourse, physically reducible, secured with typical skin.

Neck superficial sonography was not confirmative because of air- reflection.

A computed tomography (CT) scan appeared a large mixed internal and external laryngocele without regional lymphadenopathy ( Figure 1).

A large well-circumscribed thin walled saccular cyst containing air and dependent liquid density, is found within the supraglottic level in the left paraglottic space additionally has an extra laryngeal

component through the thyro-hyoid membrane. measures 6.5x6.0cm in its maximum dimension, it is not enhanced following intravenous administration of contrast (Figure 1.2 and 3).

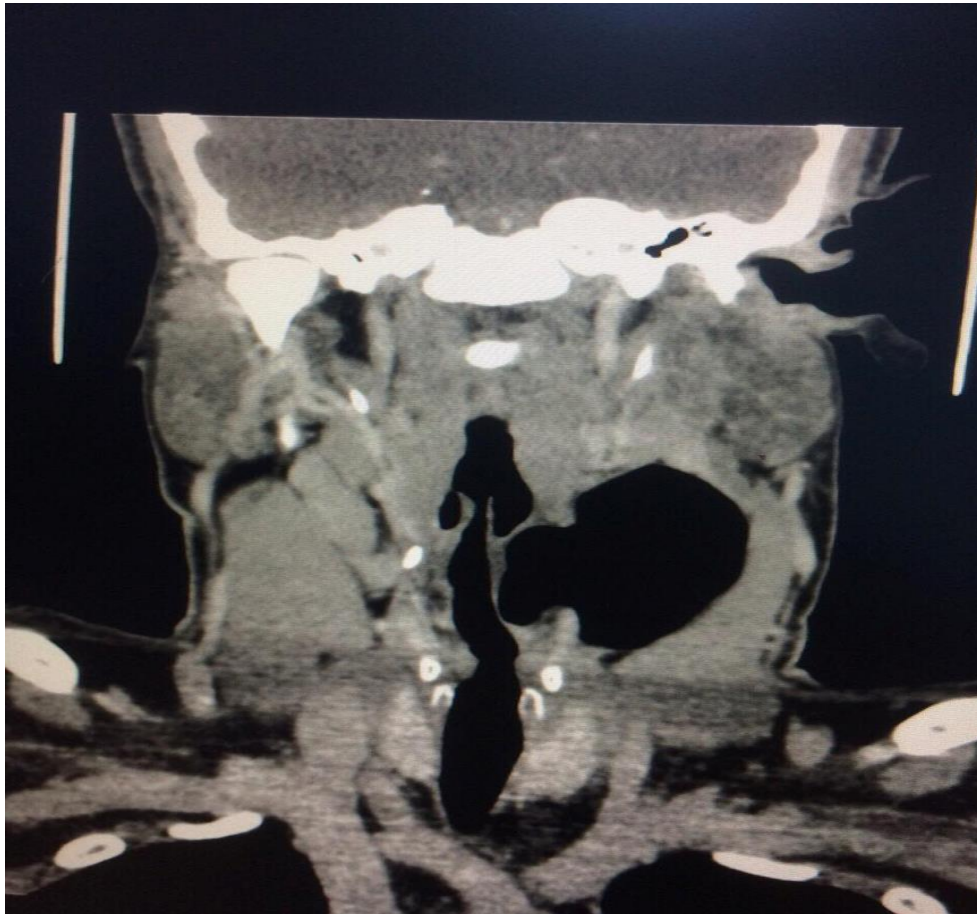


Figure (1) Coronal computed tomography image of a left-sided laryngocele

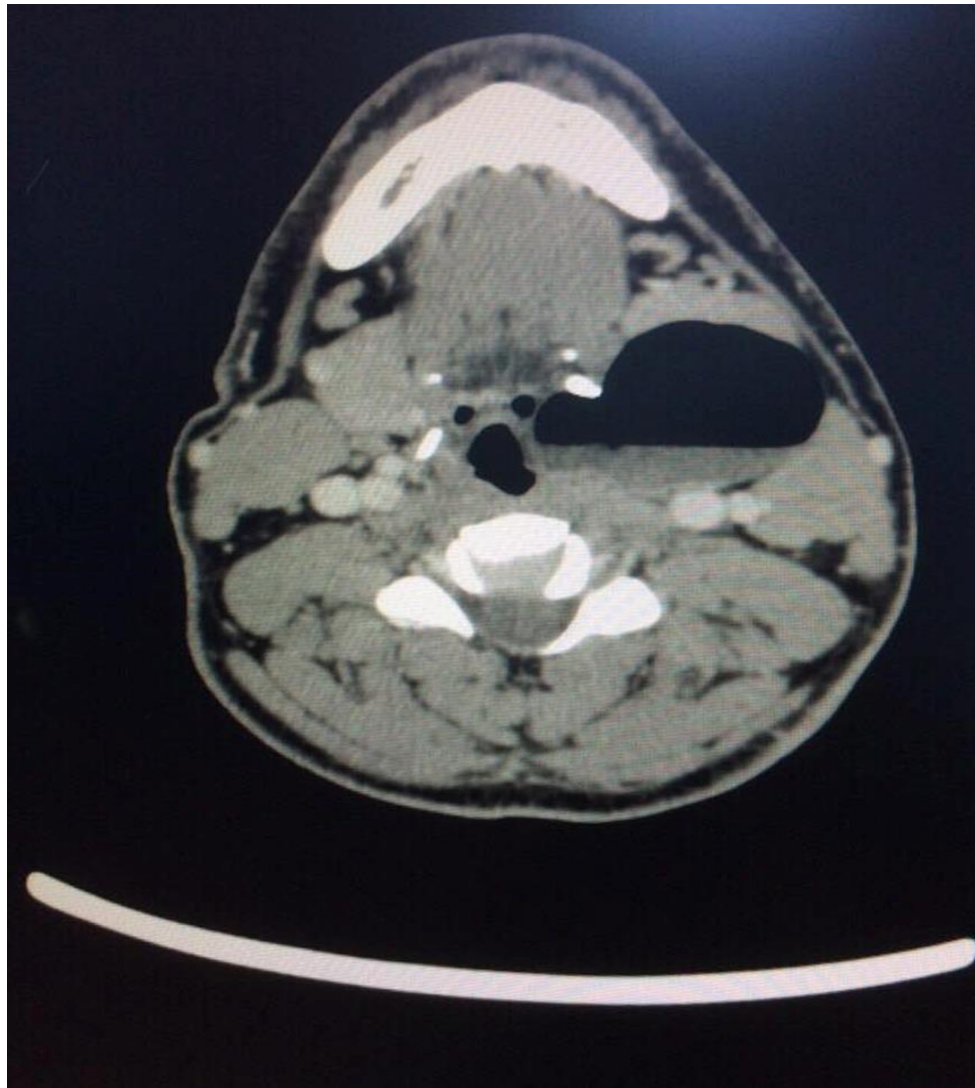


Figure (2) Axial computed tomography image of a typical unilateral combined laryngocele

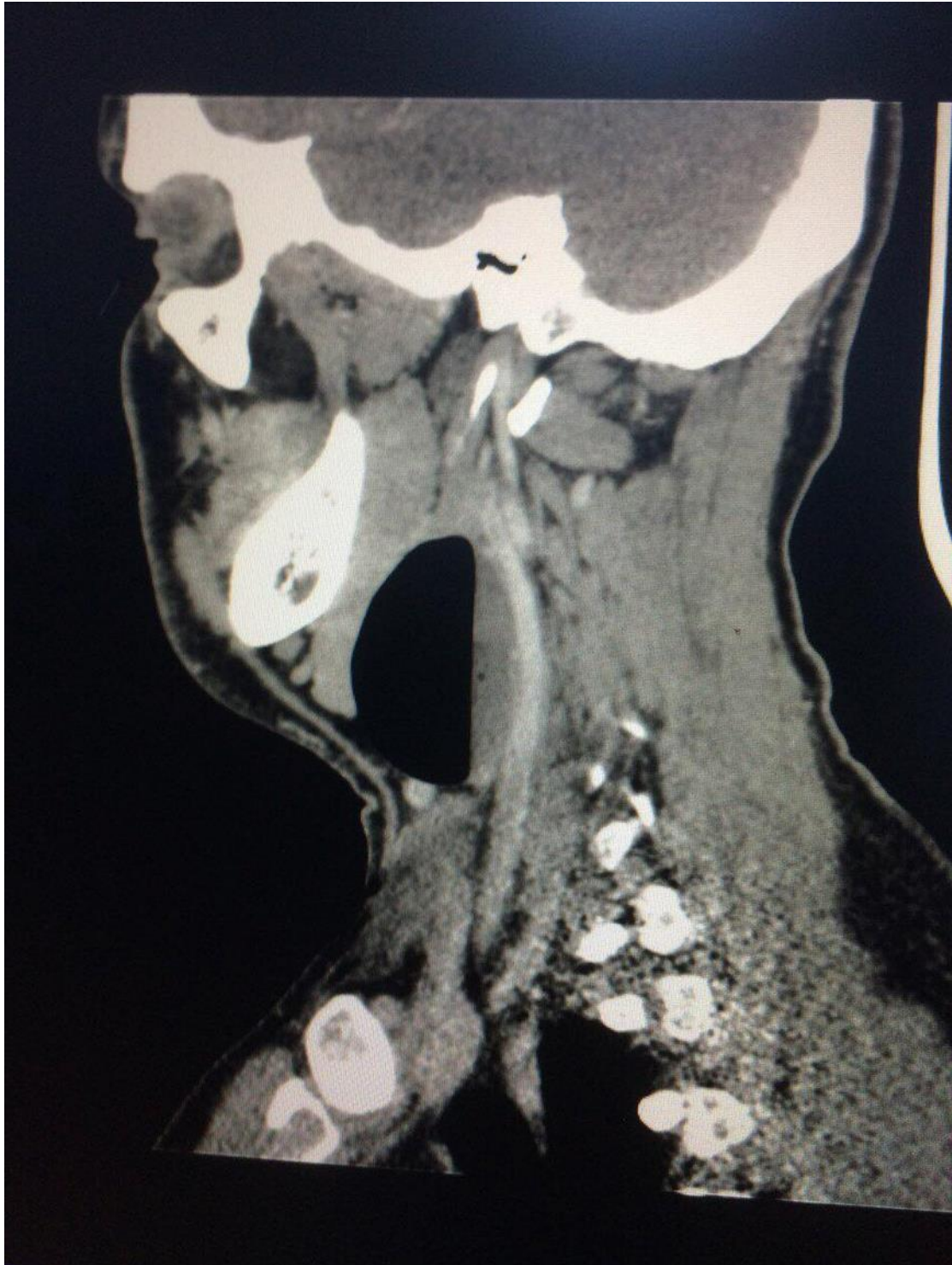


Figure (3) sagittal computed tomography image.

## Discussion

Laryngocele, an abnormal cystic dilatation of the laryngeal saccule (4), is unprecedented and may happen in up to 5% of benign laryngeal injuries (5).

There's a uncommon, but well-documented, affiliation of laryngocele with laryngeal carcinoma (4).

The aetiology is obscure and vague (6), but there's an inter-relation between a congenital inclination – spoken to by a huge ventricular appendix and other post-natal acquired components, for occasion, laryngeal papillomatosis in a child (7).

Laryngoceles may extend internally into the airway or externally through the thyrohyoid membrane (8), so they may display as internal, external or combined mixed internal and external laryngocele (9), unilateral uncommon or bilateral rare (8).

It is evaluated that 8% of laryngoceles get infected and ended up laryngopyoceles (10).

We prescribe the utilize of plain radiograph, Laryngoceles are superior acknowledged on radiographs when having an air content. In those cases, an air pocket may be watched within the upper cervical paralaryngeal delicate tissues.

A computed tomography scan (CT) is paly an vital part within the determination. regularly seen as a well-defined, air or fluid-filled lesion related to the paraglottic space, which has progression with the laryngeal ventricle. The degree will clearly depend on the subtype. weakening characteristics may alter depending on laryngocele substance (e.g. air, liquid, mucus). Magnetic resonance imaging (MRI) moreover can offer assistance, Same morphological characteristics observed on CT, usually:

T1: low intensity

T2: high intensity

T1C+ (Gd): absent-to-minimal direct peripheral upgrade; when thick improving walls are display, consider pyolaryngocele.

CT scan has demonstrated to be the foremost exact imaging strategy in characterizing the spatial relationship between the laryngocele and the laryngeal structures and extra-laryngeal delicate tissues, in separating the laryngocele from other cystic arrangements and in recognizing the coexistence of a laryngeal cancer (11).

Alternatives in the management of laryngoceles incorporate observation, endoscopic resection and resection by means of an outside approach (12).

The definitive management is surgical excision. The choices include endoscopic, external and combined (endoscopic + external) approach (13).

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