

Rare Case of False Vocal Cord Ductal Cyst

Mark Paul, Vishnu Varathan Moganadass, Shashigopalan A/L Marimuthu

Case Report

Department of Otorhinolaryngology of Hospital Tengku Ampuan Rahimah, 41200, Klang, Selangor, Malaysia.

ABSTRACT

Laryngeal cysts are benign laryngeal lesions of which incidence rate is just about 5%. These cysts have various initial presentations depending on the sites of origin. False vocal folds (ventricular band) rarely gets involved: only 5% of total benign laryngeal cysts cases. They are classified into several types based on the sites of origin and the underlying pathophysiology. Ductal cysts of false vocal fold (ventricular band) are very rare. Common symptoms are dysphagia, dysphonia, dyspnea and foreign body sensation. We discussed an elderly patient who presented with just dysphonia and final diagnosis is ductal cyst arising from false vocal cord (ventricular band). He recovered fully after endoscopic microlaryngeal resection and no recurrence was seen after 1 year. The patient was a chronic smoker but no absolute causal relationship and risk factors associated with this pathology were identified. The investigations, features and outcome of the cyst are further elaborated. Several treatment modalities were reported in literature but no superiority comparison were made.

Key Words: Cyst, laryngeal diseases, vocal cords.

Received: 16 July 2018, **Accepted:** 5 July 2020

Corresponding Author: Mark Paul, MD, Department of Otorhinolaryngology of Hospital Tengku Ampuan Rahimah, 41200, Klang, Selangor, Malaysia. **Tel.:** 016-3488438, **E-mail:** markpaul3288@gmail.com

ISSN: 2090-0740, 2021 Vol.22

INTRODUCTION

Laryngeal cysts are benign lesions of the larynx and are rather common. These cysts may be asymptomatic until the size is significant and it varies at different sites. Incidence of laryngeal cysts is just about 5% of benign laryngeal lesions^[1]. The most common sites are at the epiglottis and true vocal cords^[1]. Cases involving false vocal folds and subglottic region are rare^[2]. Common symptoms are dysphonia, dysphagia, foreign body sensation and dyspnea^[2,3]. These cysts are broadly divided into 2 types based on De Santo classification: ductal cysts and saccular cysts^[4]. Although ductal cysts are generally more common than the latter, cysts originating from false vocal cords (ventricular bands) are rare. Ductal cysts originating from false vocal cords have very minimal coverage in English literature

CASE REPORT

A 60-year old Chinese gentleman active chronic smoker with underlying Chronic Obstructive Pulmonary Disease (COPD) presented with dysphonia of 9 years duration. It was sudden onset and persistent and there was neither respiratory distress nor constitutional symptoms. There were no palpable neck swellings. Flexible endoscopy revealed a smooth surface left false cord cyst without airway compromise (Fig. 1).

He underwent endoscopic microlaryngeal surgery and the cyst was excised completely without distorting the adjacent structures (Fig. 2a & b). He was discharged home well on the next day. Histopathology confirmed it was a ductal cyst. During his post-operative follow up session 2 weeks later, there was no more dysphonia and repeated flexible endoscopy showed a normal larynx with disappearance of the cyst (Fig. 3).

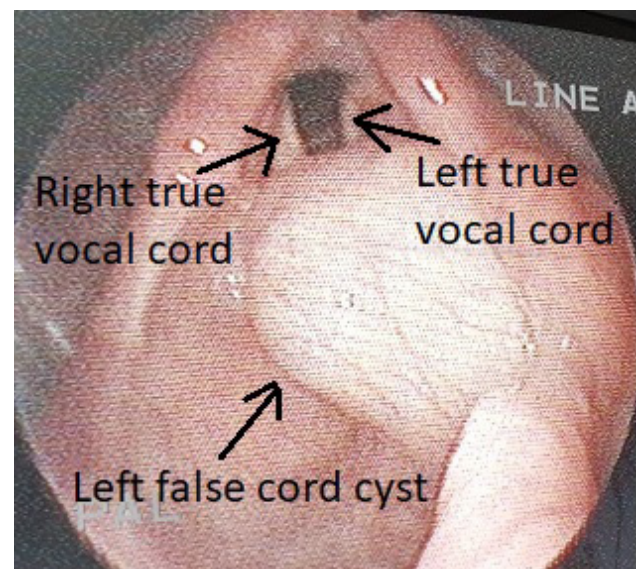


Fig. 1: Left false cord cyst seen with flexible endoscope.

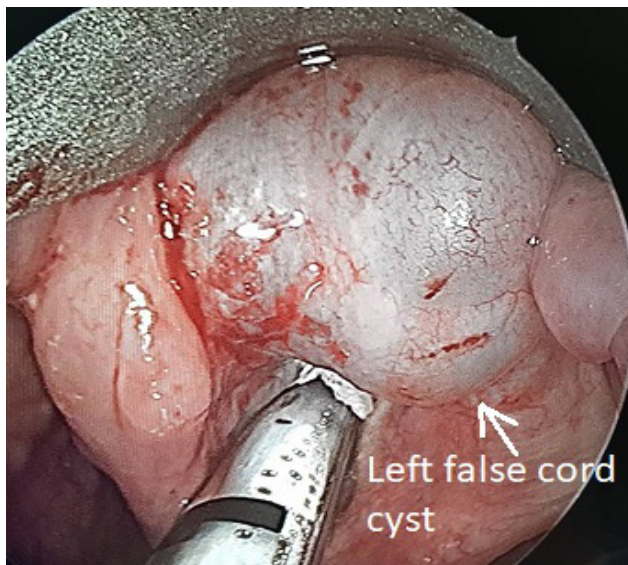


Fig. 2a: Intraoperative view during direct laryngoscopy.

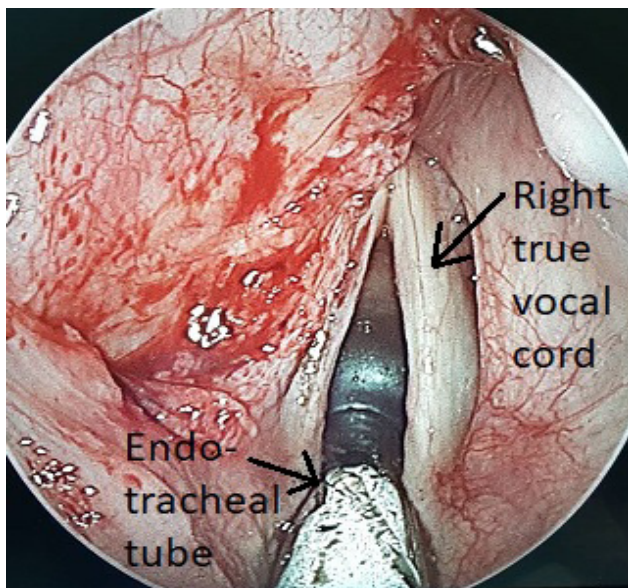


Fig. 2b: Post excision of cyst viewed with direct laryngoscopy.

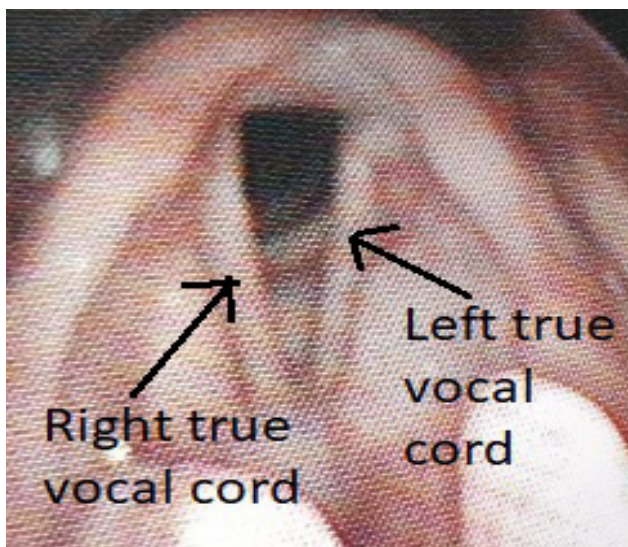


Fig. 3: Flexible endoscopic view of post-operative larynx.

DISCUSSION

De Santo classified laryngeal cysts into saccular cysts and ductal cysts with the latter being more common^[4]. Newman classified laryngeal cysts as epithelial, tonsillar and oncocyctic cysts^[4]. These are based on the locations and its underlying pathophysiology. Ductal cysts are due to obstruction of the mucous glands duct. These mucus containing-cysts are lined by double layer epithelium composed by inner columnar and outer cuboid cells^[4]. It is most commonly seen arising from true cords but never in the free margin due scarcity of these glands^[2]. Low incidence involving false vocal cords (ventricular bands) may possibly be attributed to this similar reason.

The majority of patients with these cysts are smokers but no definite causal relationship was established as the sample size is small^[2,4]. No studies indicate voice abuse being a cause.

The main presenting symptom of the false vocal fold cyst was dysphonia; this might be explained by the disturbed vocal fold vibration due to the mass effect of the false vocal fold cyst. Post surgical removal of the cyst resulted in resolving of the dysphonia.

Laryngeal cysts are generally removed via endoscopic microlaryngeal surgery, laser excision, needle aspiration and marsupialization^[2]. No studies compared which treatment modality is superior to the other. Recurrence is very rare and is usually seen in cases of incomplete excision leaving remnant cyst wall behind^[2]. As for our patient no recurrence was seen upon 1 year of follow up. This indicate the characteristics, management and outcomes are the same despite arising from a rare location.

CONCLUSION

False vocal cord (ventricular band) ductal cyst is a rare entity. The clinical spectrum is the same as other sites of the larynx and therefore a common management protocol can be utilised.

CONFLICT OF INTEREST

There are no conflicts of interest.

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