VALLECCULAR CYST

Bhushan N. Lakhkar¹, Rajagopal K. V.², Lathika Shetty³

INTRODUCTION
Congenital cysts of the larynx are rare, presenting either in infancy or in adults. The lingual surface of the epiglottis is the commonest site. As they increase in size they distort the epiglottis and eventually fill the vallecula. We report an uncommon case of valleccular cyst in an adolescent, which was diagnosed by CT and treated surgically.

CASE REPORT
A 14-year-old girl presented to the ENT department with a two year history of on and off throat pain, cough and fever. Symptoms were not associated with any difficulty in breathing or swallowing. Past history revealed chronic tonsillitis since childhood.

On examination there was evidence of enlarged tonsils bilaterally. Indirect laryngoscopy demonstrated a mass in the right vallecula. There was no airway impairment and no other abnormality was identified.

On investigation, routine blood tests and urine examination were normal. Chest radiograph and lateral radiograph of the neck were also normal.

CT demonstrated a nonenhancing cystic lesion measuring 0.8 cms in the right vallecula indenting the right epiglottis (Fig I). There was no impairment of the laryngeal airway.

Operative findings revealed a pink 0.8 cms cyst situated at the base of the tongue extending over the lingual (anterior) surface of the epiglottis. It was excised in toto and clear fluid was drained from it. Histology of the cyst lining showed denuded hyperplastic stratified squamous epithelium with prominent lymphoid follicles in the wall. Cyst fluid was sterile.

¹Prof. and Head, ²Asst Professor, ³Resident, Dept. of Radio Diagnosis & Imaging, Kasturba Hospital, Manipal
DISCUSSION

Laryngeal cysts are rare, the first reported case was published by Abercrombie J in 1881. In 1987, Mitchell et al published largest series consisting of 20 cases of laryngeal cysts in infants. Most of these children presented with stridor and were found to have supraglottic or vallecular cyst.

Congenital vallecular cysts are fairly uncommon but have stimulated interest because of their potential for morbidity and mortality. Vallecular cysts are usually asymptomatic and may present with minor symptoms. However literature have documented cases with a fatal or near fatal outcome most commonly due to acute airway obstruction.

The characteristics that determine the mode of presentation of laryngeal cysts appear to be their position and size. A small vallecular cyst is less likely to present with stridor or cause impairment to swallowing. However as mucous production distends it further, the cyst will progressively interfere with swallowing. A stage will be reached when airway becomes compromised. In our case, the cyst was detected at an asymptomatic stage.

The De Santo classification of laryngeal cysts into ductal and saccular cysts is essentially related to the position of the cyst in the larynx and its depth in the mucosa. The commonest site is the lingual surface of epiglottis. Cysts here are confined to the submucous layer, neither involving the cartilage nor ulcerating the overlying mucosa. Other sites are aryepiglottic folds, ventricle, true and false vocal cords, arytenoids and the pyriform fossa. Ductal cysts (mucous and retention cysts) are thought to originate from obstructed submucosal glands and are found most frequently in the vallecula. Saccular cysts are less commonly seen and occur in the plane of the saccule. They differ from laryngoceles only in that they contain mucous, while laryngocele contain air. Ramesar et al, in their study, grouped the cysts almost exclusively occurring in the vallecula, epiglottis and pyriform sinuses as tonsillar cysts and believe that they are related to lympho epithelial cysts of the oral cavity.

A lateral radiograph of the neck may demonstrate vallecular cyst as a soft tissue mass in the hypopharynx and is confirmed by laryngoscopic examination. In our case, lateral radiograph of the neck did not show any mass owing to the small size of the lesion. Congenital cysts of the larynx are well demonstrated on the CT scans. The thin cyst wall and uniform density cyst contents are readily apparent. With the aid of serial scans, the position of the cyst within the larynx can be determined. In our case, CT confirmed the site and cystic nature of the mass in right vallecula indenting the epiglottis on the right side (Fig 1).

The incidence of the vallecular cysts is low. They deserve full awareness of their existence because clinically they produce upper airway obstruction. This article stresses the importance of cross section imaging like CT in diagnosing this condition.

REFERENCES