Multiple Oncocytic Cystadenomas
of the Larynx

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Abstract

Objective: To report a unique case of multiple oncocytic cystadenomas in the larynx.

Methods: A review of the English literature and histological analysis was performed. An extensive PubMed search was performed for laryngeal cysts, oncocytic cysts, and oncocytcystadenomas.

Results: Laryngeal oncocytic cystadenomas are infrequently reported in the literature, particularly multiple simultaneous cysts in a singular patient. We present a case where multiple cysts were identified in the larynx on initial transnasal laryngoscopy. CT scan demonstrated a well-circumscribed lesion in the supraglottis with a hypodense center, consistent with a cyst. Transnasal laryngoscopy revealed submucosal fullness in the left ventricle, the right aryepiglottic fold. A lesion on the anterior surface of the epiglottis was visualized but is not shown in this image.

Case Presentation

A 78-year-old woman presented with a 22-year history of dysphonia. She had undergone laser excision of a sizeable cyst in the left ventricle and the right aryepiglottic fold. CT scan demonstrated a well-circumscribed lesion in the supraglottis with a hypodense center, consistent with a cyst. Transnasal laryngoscopy revealed submucosal fullness in the left ventricle, the right aryepiglottic fold. A lesion on the anterior surface of the epiglottis was visualized but is not shown in this image.

Discussion

Oncocytic cystadenomas, also known as oncocytic cysts, are benign lesions that possess distinct characteristics to differentiate them from similar lesions. An oncocytic cystadenoma is characterized by a smooth cyst wall composed of eosinophilic cells with granular cytoplasm due to numerous mitochondria. The cyst will be adjacent to normal respiratory epithelium. Other lesions that resemble oncocytic cystadenomas but must be excluded from the differential include papillary cystadenomas, oncocytomas, and Warthin's tumor. All may be found in tissues where salivary glands are present including the larynx, parotid, nasopharynx, palate, buccal mucosa, and lacrimal glands.

Conclusions

Oncocytic cystadenomas are rare, benign cysts that may occur in any glandular tissue. Their evolution is controversial and is thought to arise from either a metaplastic or neoplastic process. Smoking is a potential risk factor.

On physical exam, they appear as smooth, dome-shaped submucosal lesions that may be violet. CT imaging reveals a thin-walled cyst with a homogeneous, hypodense center.

The diagnosis is made histologically and is based on the presence of smooth oncocytes lining the cyst adjacent to a normal pseudostratified columnar respiratory epithelium without lymphoid infiltration.

Dysphonia is the most common presenting symptom.

For symptomatic patients, complete surgical excision is recommended. KTP laser excision is a safe and effective treatment when in close proximity to the vocal cords.

References