Hamartoma of the Larynx: A Report of Two Cases

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ABSTRACT

Educational Objective:
At the conclusion of this presentation, the participants should be able to describe the clinical presentation, histopathologic findings, and management strategies of hamartomas occurring in the larynx.

Objectives:
Hamartomas of the larynx are extremely rare, we describe two cases, and review the clinical presentation, histopathologic findings and management of this entity.

Study Design:
A case report and review of the literature.

Methods:
Case report and Medline search of the term hamartoma of larynx.

Results:
Hamartomas are defined as a congenital malformation that consists of a focus of mature, locally derived tissue with abnormal histological architecture. Hamartomas affecting the larynx are extremely rare, with less than twenty well-documented cases in the literature. We report the first case in the English language literature of a patient with a laryngeal hamartoma presenting with a vocal cord paralysis secondary to involvement of the recurrent laryngeal nerve. We also report a case of a large supraglottic hamartoma causing airway obstruction and requiring a partial laryngectomy.

Conclusions:
Hamartomas of the larynx are rare benign entities that can be locally destructive and cause airway obstruction. Two patients are presented showcasing the clinical symptoms, workup, management and subsequent follow up data.

INTRODUCTION

Hamartomas are defined as a congenital malformation consisting of:
- Excessive and disorganized growth
- Foci of mature, locally derived tissue
- Abnormal histological architecture
- Hamartomas are common among benign masses found in the lung.
- Head and neck manifestations are rare and can occur anywhere along the aerodigestive tract.
- Laryngeal affliction is reported to be the rarest.
- Only twenty well-documented cases appear in the literature.

METHODS AND MATERIALS

- A case report of two patients presenting with laryngeal hamartoma.
- A review of the literature utilizing a Medline search of the terms “hamartoma”, “larynx”.

CASE #1

The patient is a 75-year-old male who presents with several years of hoarseness. On fiberoptic laryngoscopy, there was a 5 mm submucosal mass involving the aryepiglottic fold. A CT scan obtained indicated that the mass was extending into the proximal subglottic region.

Panendoscopy and biopsy were non-diagnostic. Due to the suspicion for malignancy, the patient underwent complete excision via an open extended vertical hemilaryngectomy. Histology revealed a hamartoma with foci of vascular, fatty and cartilaginous elements (Figure 1). No evidence of recurrence after fourteen months of follow-up.

CASE #2

The patient is a 62-year-old male who presents with two months of hoarseness after prolonged intubation for pneumonia. On examination, he had a left vocal cord paralysis with no other abnormalities visualized. A CT scan obtained incidentally revealed a subglottic soft tissue mass with partial erosion of the cricoid cartilage.

Rigid bronchoscopy revealed a submucosal mass confined to the subglottis, and an excisional biopsy was performed. Histology demonstrated a nodule composed of adipose tissue along with vascular channels and nerve bundles, consistent with hamartoma (Figure 2). On nine month follow-up, the patient had no evidence of recurrence.

DISCUSSION

- Although benign, lesions can be locally destructive and cause airway obstruction.
- Imaging:
  - Determines local extent
  - Aids in treatment planning
- Histology:
  - Disorganized architecture with mesenchymal or epithelial foci
- Diagnosis can be difficult as histologically resemble:
  - Chondromas
  - Teratomas
  - Choristomas
  - Fibromas
- Treatment modalities reported:
  - Local surgical excision with preservation of laryngeal function
  - Debulking / resection with CO² laser
  - Partial or total laryngectomy (reserved for larger lesions)
- Recurrence rate at 20%, often associated with incomplete removal

CONCLUSIONS

- Hamartomas of the larynx are rare benign entities that can be locally destructive and cause airway obstruction.
- We report the first case in the English language literature of a patient with a laryngeal hamartoma presenting with a vocal cord paralysis secondary to involvement of the recurrent laryngeal nerve.
- We report a case of a large supraglottic hamartoma causing airway obstruction necessitating a partial laryngectomy.

REFERENCES