A Rare Benign Tumor of Vocal Cord: Myxofibrolipoma

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ABSTRACT

Laryngeal lipomas are rare. Most of these arise from the aryepiglottic folds of which intrinsic tumors most frequently originate from the false vocal cords. The present case report describes a giant tumor arising from true vocal cord, and that too with a rare histopathology which revealed lipoma with myxomatous degeneration and fibrous changes. Clinical features, management and relevant literature are discussed.

Keywords: Myxofibrolipoma, Vocal cord, Airway obstruction.

INTRODUCTION

Lipomas of the larynx are very rare. Fewer than 15% of the lipomas occur in the head and neck region. Till date, only 115 cases of lipoma of the larynx have been reported in literature.

They usually occur in those parts where fat is normally present subepithelially. Hence, most of them arise from the aryepiglottic folds of the epiglottis; intrinsic tumors most frequently originate in the false vocal cords. In general, these benign neoplasms are encapsulated, smooth and usually pedunculated. Lipomas occur predominantly in males (male to female ratio of 5:1), and in the 3rd to 5th decade of life. Lipomas may be submucosal as well. These can deform the larynx and cause phonatory disturbances and partial airway obstruction. Pedunculated lipomas may cause significant airway obstruction.

CASE REPORT

A 40-year-old North Indian male was referred to our institution, with the complaints of change in voice and breathlessness. He had addiction history of cigarette smoking since 5 years, consuming approximately five cigarettes per day and drug history of intake of antibiotics and drugs for gastroesophageal reflux for past 6 months. He had no history of vocal abuse. Indirect laryngoscopic examination showed a pedunculated mass, approximately 2 × 3 cm, arising from the right true vocal cord obscuring the airway. Mobility of the right true vocal cord was limited due to the mass effect. These findings were confirmed via fiberoptic laryngoscopy as illustrated in Figure 1. Direct laryngoscopic biopsy was performed under general anesthesia with elective tracheostomy which revealed lipoma with myxomatous degeneration and fibrous changes have been illustrated in Figure 2. Tumor was excised surgically via intraoral approach; microlaryngoscopic surgery under general anesthesia. Soon after surgery, the patient’s voice was back to normal. Currently, the patient is doing well.

Fig. 1: Preoperative laryngoscopic picture

Fig. 2: Histological picture of tumor

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with complete resolution of his symptoms of change in voice and breathlessness. Figure 3 shows the postoperative picture.

**DISCUSSION**

Lipomas are benign tumors, rarely seen in the larynx. Most laryngeal lipomas are of isolated occurrence and mostly asymptomatic. Small lipomas or even those of moderate size may produce no symptoms or may only be discovered accidentally. Lipoma can be intrinsic or extrinsic. The intrinsic form is uncommon and involves the regions, such as: false vocal cords, epiglottis and aryepiglottic folds, where fat forms the subepithelial structure. Among all intrinsic lipomas, glottic form is the rarest.\(^2,4\)

Grossly, lipomas are of variable size. They tend to appear as smooth or lobulated masses, often well demarcated or encapsulated and yellowish in color. Microscopically, lipomas are composed of mature adipocytes, have a large central vacuole which often displaces the nucleus peripherally. Multipotential fibroblast can differentiate into a fat cell but the true etiology of laryngeal lipoma is not clear.\(^3\)

Presenting complaints may include: loss or alteration in voice, dyspnea, dysphagia, sensation of throat mass, snoring, irritation and paroxysmal cough. Diagnosis has become easy nowadays through imaging studies. On computed tomography scan, fat tissue shows up as typically homogenous image with a low attenuation value. On magnetic resonance imaging scan, lipoma follows the signal characteristic of fat, which is hyperintense on T1-weighted image. When diagnosis is in doubt, additional fat suppression sequence may be performed.\(^3\)

Histologically, myxofibrolipomas are encapsulated tumors composed of mature adipose cells. Cells are usually uniform, discretely ranging in size and shape that exhibits abundant mucoid tissue and fibrous change.

Surgical approach is the treatment modality for all histological types of lipomas of the larynx. Endoscopic removal of lesion is sufficient in the pedunculated type and for small masses,\(^5,8\) whereas submucosal and larger tumors should be removed via an external approach.\(^6,7\) In our case, the tumor was managed via former approach. Excision of the tumor should be complete in order to avoid possible recurrence.

**REFERENCES**