CASE REPORT

Giant laryngopharyngeal lipoma

Bo Li a,b, Xiaoming Fan c, Delong Liu a, Yang Song d, Cuiping She a,*

a Dalian Municipal Central Hospital, Department of Otorhinolaryngology Head and Neck Surgery, Dalian, China
b Dalian Medical University, Dalian, China
c Dalian Municipal Central Hospital, Department of Pathology, Dalian, China
d Dalian Municipal Central Hospital, Radiology Department, Dalian, China

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Introduction

A lipoma is a benign tumor derived from mesenchymal cells that is most commonly found within the subcutaneous tissues of the limbs and trunk. However, rare cases of lipomas situated within the hypopharynx have been reported that comprise approximately 0.6% of all benign hypopharyngeal tumors. In his 1995 review of laryngopharyngeal lipoma cases, Wenig summarized three new cases along with approximately 80 previously reported cases found within the literature. Since then, the total number of reported laryngeal and hypopharyngeal lipoma cases has increased to almost 100 cases to date. This concise review, which focuses on clinical information related to one new hypopharyngeal case treated at our hospital and previously reported laryngopharyngeal lipoma cases, provides a comprehensive overview of the diagnosis and treatment process for individuals with laryngopharyngeal lipomas.

Case report

A 58-year-old male presented to the emergency room with dyspnea and a red mass protruding from his mouth. Upon examination, the patient was conscious with stridor, and his blood oxygen saturation was at 90%. The extraoral mass was about 15 × 6 × 4 cm in size, soft, and showed no tenderness (Fig. 1). Computed Tomography (CT) scanning of the mass revealed that the oropharynx and upper pharyngeal respiratory tract harbored dense soft tissues extending into the oral cavity, while the normal structure of the left pyriform fossa was no longer visible (Fig. 2). Given the patient’s respiratory difficulty and the urgency of the situation, a tracheotomy under local anesthesia was initially performed. Subsequently, a gastroscopy under general anesthesia was conducted to locate the base of the tumor. The tumor originated near the entrance of the esophagus from the posterior cricoid mucosa on the left side, with a broad base. The mid-

Fig. 1 The size of the extra-oral mass was about 15 × 6 × 4 cm.
The size of the resected mass during the operation was approximately 20 × 6 × 4 cm.

Discussion

Lipomas of the hypopharynx and larynx are very rare. A comprehensive review of the global lipoma-related literature indicated that laryngopharyngeal lipomas predominantly range in size from a few millimeters to 6 cm. Remarkably, the size of the 20-cm-long lipoma detected in this case, as documented in this report, surpasses that of the largest previously reported 18-cm-long laryngopharyngeal lipoma and thus is the largest laryngopharyngeal lipoma reported to date. Most patients experience mild but persistent long-term symptoms. Significantly, laryngopharyngeal tumor growth can lead to severe complications, including sudden airway obstruction that potentially results in death by asphyxiation, as reported in this study’s case, where the patient’s respiratory distress symptoms required
surrounding tissues. Although the use of low-temperature plasma technology for tumor removal is relatively safe, careful operation is imperative due to the large size, abundant blood supply, and broad base of the tumor, as well as the difficulty in exposing the pedicle. This careful approach is necessary to avoid complications such as excessive bleeding, mucosal damage, and potential esophageal perforation.

Conclusion

In conclusion, laryngopharyngeal lipomas are rare in clinical practice. Herein we report the largest laryngopharyngeal lipoma reported to date. Literature review indicates that while most laryngeal lipoma patients experience mild symptoms, there is a risk of rapid airway obstruction. Tracheotomy is imperative in cases of respiratory distress. The hemostatic capability of plasma knives offers a distinct advantage in tumor treatment. It is advisable to opt for plasma surgery when the laryngopharyngeal surgical field is well exposed, and the tumor base is clearly visible. Furthermore, postoperative pathology should be carefully evaluated to differentiate lipomas from highly differentiated liposarcomas, while long-term post-surgical follow-up monitoring of tumor recurrence should be conducted to improve patient treatment outcomes.

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Conflicts of interest

The authors declare no conflicts of interest.

References