

## OLGU BİLDİRİSİ / CASE REPORT

# Laryngeal lymphangioma: a case report

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### Laringeal lenfanjiyom: olgu sunumu

Lenfanjiyomlar çocukluk çağının benign konjenital kitleleridir. Vücudun birçok bölümünde görülebilir, fakat larinkste rastlanması oldukça nadirdir. Kliğinimize ses kısıklığı ve yutma güçlüğü ile başvuran 23 yaşındaki erkek hasta değerlendirildi. Endirekt laringoskopide epiglotun sol tarafından kaynaklanan 3x3 cm boyutlarında vaskülarize görünümlü kitle dikkati çekti. Hastaya genel anestezi altında, lateral faringotomi yaklaşımı ile kitle eksizyonu uygulandı. Perioperatif olarak yapılan frozen çalışması lenfanjiyom ile uyumlu olarak geldi ve postoperatif yapılan histopatolojik incelemede lenfanjiyom tanısı kondu.

**Anahtar Sözcükler:** Lenfanjiyom, larinks.

### Abstract

Lymphangiomas are uncommon benign congenital lymphatic tumors of childhood. They are found in all parts of the body structure but rarely occur in the larynx. The presence of laryngeal lymphangiomas was rarely reported in the literature. A 23-year-old male presented with progressive difficulty in swallowing for a year and occasional hoarseness. Indirect laryngoscopy revealed a tumoral mass in 3x3 cm size with a vascularized appearance which originated from left endolaryngeal side of epiglottis. The patient underwent left lateral pharyngotomy under general anesthesia. The perioperative frozen section was reported as favored benign lymphangioma. Postoperative histopathologic examination revealed lymphangioma.

**Key Words:** Lymphangioma, larynx.

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### Introduction

48-75% of the lymphangiomas present in the head and neck region with over 90% of lesions diagnosed before 2 years of age and they usually manifest as an asymptomatic mass in the posterior triangle. The presence of laryngeal lymphangiomas was rarely reported in the literature. It may develop endolaryngeally; but forms originating from the neck with larynx invasion may also exist. It may present in distinct patterns as cystic hygroma (separate cystic cavities), cavernous (dilated lymphatic ducts), symplex (capillary) lymphangioma.<sup>1</sup> Most common involved sites include aryepiglottic plica, false vocal cords and arythenoids.<sup>2-4</sup>

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### Case Report

A 23-year-old male presented with progressive difficulty in swallowing for a year and occasional hoarseness. Indirect laryngoscopy revealed a tumoral mass in 3x3 cm size with a vascularized appearance which originated from left endolaryngeal side of epiglottis and extended through the left pyriform sinus and anterior side of the left arythenoid blocking completely the view of left aryepiglottic fold and pyriform sinus and normal vocal cord movements. A computerized tomography scan of the neck described the mass as an oval shaped lesion with quite smooth and sharp edges in the left vallecula and pyriform sinus with a size of 28x12 mm and a height of 3 cm (Figure 1). The mass displaced epiglottis forward severely narrowing proximal ostium of the esophagus. Magnetic scan of the neck revealed a mucosal mass with smooth edges located in the posterior wall of the larynx filling left aryepiglottic fold and pyriform sinus extending through the lumen with smooth edges in the supraglottic region which showed a slight contrast enhancement. The lesion was defined as hypointense in T1 sections and hyperintense in T2

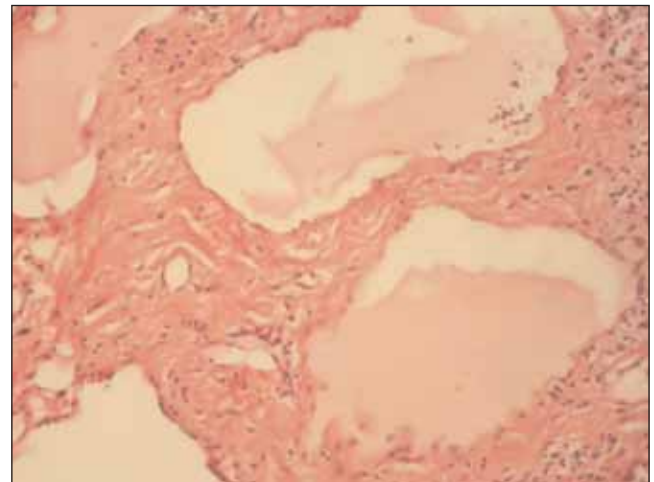


**Figure 2.** Macroscopic appearance of the mass preoperatively. [Color figure can be viewed in the online issue, which is available at [www.turkarchotolaryngol.org](http://www.turkarchotolaryngol.org)]

sections and reached a size up to 3 cm in diameter. No involvement of vasculature was documented. The remaining ENT and systemic examinations of the patient were considered as normal. A biopsy of the submucosal tumoral mass originating from left aryepiglottic plica which filled left sinus pyriformis was obtained by endoscopy and reported to be a



**Figure 1.** Axial view of the patient's CT reveals a tumoral mass over the left aryepiglottic plica filling vallecula.



**Figure 3.** Large irregular cystic cavities filled with proteinaceous fluid. These cavities are covered by the smooth endothelial cells and marked lymphocytic infiltration is present (HE x220). [Color figure can be viewed in the online issue, which is available at [www.turkarchotolaryngol.org](http://www.turkarchotolaryngol.org)]

benign lesion. The patient underwent left lateral pharyngotomy under general anesthesia, the perioperative frozen section was reported as favouring lymphangioma (Figure 2). Postoperative histopathologic examination revealed lymphangioma (Figure 3). Postoperatively, the patient was followed-up for 12 months without any complications.

## Discussion

Lymphangiomas are rare benign congenital lymphatic tumors of childhood. The cases were diagnosed usually in the neonatal period and 75% of them had their diagnosis in the first year of life.<sup>1</sup> A small percentage of these tumors develops in adults secondary to the obstruction and fibrosis following the inflammation of the lymphatics.<sup>4</sup> Very few cases of laryngeal lymphangioma were reported in the literature. Lymphangioma of the larynx causes hoarseness, difficulty in respiration and swallowing. The neck lymphangiomas located in the larynx originate from aryepiglottic plica, epiglottis, vallecula, pyriform sinus. They are usually confused with laryngomalacia. They appear as polypoid lesions or masses with peduncles.<sup>1,5</sup> Lesions over the mylohyoid muscle are mostly small lymphatic ducts and they infiltrate the surrounding tissue. In contrast the ones located in the anterior and the posterior triangle are mostly cystic and non-infiltrative.<sup>6</sup>

The treatment of this condition is surgical excision of the mass. The excision may be difficult if the tumor in the tongue and mouth infiltrate the muscle fibers. Tracheotomy is required in half of the patients with laryngeal lymphangioma. Recurrences are common when a complete resection can not be achieved. Ravitch and Rush and Emery et al. reported the recurrence rate in residual lesions as 10% and

52%; respectively.<sup>7,8</sup> Ricciardelli and Richardson suggested that suprahyoid lymphangiomas exhibit a higher rate of recurrence than infrahyoid ones.<sup>9</sup>

## Conclusion

Lymphangiomas should be differentiated from other laryngeal obstructing masses. After the diagnosis, surgery is the treatment of choice. Laser excision is preferable treatment and improves morbidity and the quality of life of these patients after the operations.

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**Conflict of interest statement:**  
No conflicts declared.

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