CASE REPORT

Spindle cell lipoma, a rare entity affecting the larynx: A case report

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Abstract

Spindle cell lipoma is a very rare occurrence in the larynx and can be cured by complete excision. In this case report we present the case of a 71-year-old female who presented to the otorhinolaryngology outpatient department of Northwest General Hospital and Research Centre, Peshawar, with complaints of occasional irritation and a foreign body sensation in the throat while swallowing, for the last three years. She had undergone a surgical procedure 30 years back for the same complaint and remained asymptomatic till three years back. On examination, through fibre-optic laryngoscope, the attending surgeon saw an abnormal mass arising from the aryepiglottic folds of the larynx. An excisional biopsy was performed through micro-laryngoscopy. The patient's symptoms subsequently improved and she is currently doing well. Histopathological reports confirmed it as spindle cell lipoma.

Keywords: Voice, Dysphonia, Head and neck surgery, Endoscopy, Phoniatrix.

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Introduction

Spindle cell lipomas (SCL) represent a rare variety of lipomatous tumours that commonly manifest as localised, slow-growing masses in the subcutaneous fatty tissue of the back, shoulders, and posterior neck.[1] Histologically, Spindle cell lipomas are usually composed of mature adipocytes, small uniform spindle cells mixed with collagen bundles, and a myxoid matrix.[2] A diagnosis of spindle cell lipoma can only be made on histopathological analysis.[3] Despite the fact that 13% of lipomas are detected in the head and neck, the larynx only accounts for 0.6% of the cases, larynx and hypopharynx spindle cell variants have very rarely been observed.[4] Surgical excision is usually the treatment of choice.[5]

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Case Report

A 71-year-old female patient, a known case of asthma and hypertension, presented to the otorhinolaryngology outpatient department at Northwest General Hospital and research center, Peshawar, KP on 18th August 2022 with complaints of occasional irritation and a foreign body sensation in the throat while swallowing for the last three years. She explained that the irritation starts after swallowing oily food and is always followed by a bout of non-productive cough which usually resolves in 2-5 minutes. The patient also felt as if there was a mass in her throat when she swallowed. There was no odynophagia, dysphagia, tenderness or discolouration over the throat and no mass was visible or palpable over the neck either. She had the sensation that the mass was increasing in size over time. There was no associated fever, weight loss, and otological or nasopharyngeal symptoms. There had been no changes in her voice either, apart from a few occasions when her speech would stop mid-sentence spontaneously and would return again in a couple of seconds. She underwent a surgical procedure around 30 years ago for a similar complaint and remained completely asymptomatic till three years back, however she did not have any surgical record.

The examination revealed an abnormal collection of multiple pedunculated soft tissue masses arising from the aryepiglottic folds of the larynx through fibreoptic laryngoscopy (Figure 1). The masses were very mobile and would move and flutter freely from the base during talking or exhaling forcefully. Subsequently, the patient underwent endoscopic laryngoscopy under general anaesthesia (Figure 2) which revealed multiple pedunculated fibro-fatty masses based on left aryepiglottic folds near the epiglottis. The masses were excised from their bases using cautery and cold steel instrument with preservation of arytenoid joints (Figure 2). Histopathological analysis of the surgical

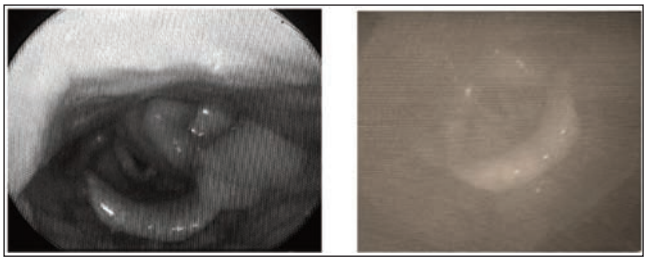

Figure-1: Pre and post-operative endoscopic view of larynx.

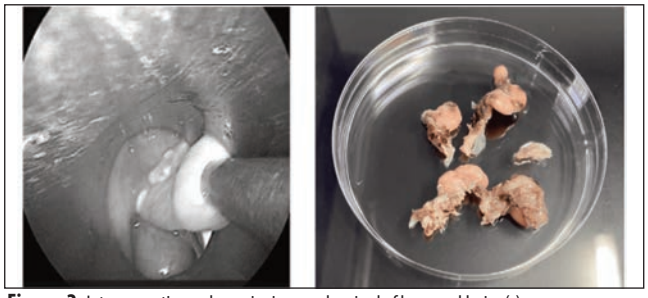

Figure-2: Intra-operative endoscopic views and excised of laryngeal lesion(s)

specimen confirmed the diagnosis of spindle cell lipoma. The patient's recovery was uneventful, with no upper aerodigestive tract symptoms. Follow-up flexible laryngoscopy at three months revealed a near normal larynx with no sign of residual or recurrent laryngeal lesion (Figure 1).

Discussion

Spindle cell lipoma was originally identified in 1975 by Enzinger et al. as a subtype of lipoma that could easily be mistaken for a liposarcoma as they both share common histological features.[6] Spindle cell lipoma is commonly seen in the upper back or posterior neck; however, it has also been reported in other areas of the head and neck region.[7] A lipoma arising in the larynx is infrequent on its own as they account for less than 1% of all benign laryngeal tumours; of the approximate 125 cases of laryngeal lipomas that have been reported so far, only six cases were of spindle cell type, making a case of spindle cell lipoma in the larynx a very rare occurrence.[8] Spindle cell lipomas commonly affect males between the ages of 40 to 60 with peak frequency in the sixth decade.[9] It can be diagnosed and differentiated from other types of lipomas by conducting a histopathological study. This case report highlights that spindle cell lipoma should be one of the differentials when treating a newly discovered similar architecture soft tissue mass in the larynx as it is treatable with simple accurate excision.

Conclusion

Spindle cell lipoma in the larynx is an exceptionally rare occurrence, with only a handful of cases reported in the literature. Complete surgical excision remains the primary mode of treatment, and the prognosis is generally favourable with no reports of recurrence or metastasis. Clinicians should consider this diagnosis in patients presenting with laryngeal masses, particularly those with characteristic imaging findings and histological features.

Consent: Consent was provided by the patient for publishing the case report.

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Conflict of Interest: None.

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Author Contribution:
HS: Data analysis.
IMK: Design and concept.
HM: Data collection.