Spindle cell lipoma of the epiglottis: A very rare case

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Abstract

Introduction

Lipomas of the larynx and hypopharynx comprise of less than 0.5% of benign neoplasms at these sites. Spindle cell lipomas are an uncommon variant of lipoma and these are extremely rare in the larynx. Only 5 cases have been previously described in the literature. The aim of this report is to demonstrate a very rare case of spindle cell lipoma of the epiglottis and it is mandatory to observe these patients at long-term follow up for the possibility of recurrence.

Case report

We report a case of an 80 year old man who presented with a 6 month history of hoarseness of the voice, dyspnea and a sensation of something sticking in the throat. Laryngoscopic examination revealed a well circumscribed smooth surfaced mass 3.5cm in dimension with a broad base on the upper surface of the epiglottis. CT scan examination showed a low-density mass. The mass was removed endoscopically. Micsoscopically the lesion is composed of bland spindle cells and hyperchromatic round cells with an abundant lipomatous stroma. In the immunohistochemical study the lesional cells were positive with CD34 and bcl2 (Figure 3). Based on the above characteristic morphologic and immunohistochemical finding a diagnosis of spindle cell lipoma was made.

Discussion

Lipomas are the most common benign tumours of mesenchymal origin. It has been estimated that 13-15% of lipomas occur in the head and neck region. The upper aero-digestive track is a very rare location. Spindle cell lipomas are an uncommon variant of lipoma accounts for approximately 1.5% of all adipose tumors 1,7,8.

Spindle cell lipomas of the larynx are extremely rare. The true aetiology is not clear. Multipotential fibroblast can differentiate into a fat cell through an unknown mechanism 1,7,8.

Early after surgery the patient’s symptoms resolved. Over a 2 year follow up the patient has shown no signs of recurrence.

Conclusion

Spindle cell lipomas are benign mesenchymal tumours with very rare location in the larynx. Complete surgical excision is therefore the treatment of choice and includes either endoscopic or external surgical procedures.

Figure 1: Laryngeal spindle cell lipoma (H/Ex40).

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such as retention cysts or laryngoceles. Also the distinction between spindle cell lipoma and the sclerosing or myxoid form of liposarcoma is based on the absence of lipoblasts, nuclear pleomorphism, mitotic activity, mucinous material and a diffuse plexiform capillary network.1,2,8

Pre-operative diagnosis is possible with the use of imaging techniques such as CT scan and MRI. On CT scan fat tissue shows up as typically homogeneous with a low attenuation value and a density lower than that of water. The MRI is to be preferred since it allows better examination of the soft tissues.1,2,8,10,11

Histologically spindle cell lipoma can vary widely in its appearance. Usually it is composed of a variable admixture of bland spindle cells and hyperchromatic round cells arranged in an abundant lipomatous stroma with thick rope-like collagen bundles. Some tumours show extensive myxoid change whereas others are predominantly solid and lack any significant lipomatous component.7,8,12

Complete surgical excision is therefore the treatment of choice and includes either endoscopic or external surgical procedures.

The choice of an external surgical approach is based on several characteristics of lipoma such as site, submucosal growth and size. Large non pedunculated tumours require an external approach using thyrotomy, transhyoid or lateral pharyngotomy. Non pedunculated tumours require an external approach using thyrotomy, transhyoid or lateral pharyngotomy. Since spindle cell lipomas can relapse even after several years long term follow up is mandatory.8,14,15

Conclusion
Spindle cell lipomas are benign mesenchymal tumours with very rare location in the larynx. Complete surgical excision is therefore the treatment of choice and includes either endoscopic or external surgical procedures.

It is useful to keep in mind the possibility of recurrence after long free intervals. Therefore it is mandatory to observe these patients at long-term follow up.

Abbreviations list
Spindle cell lipoma, Larynx, Surgical techniques.

Consent
Written informed consent was obtained for this case report and accompanying images. A copy of the written consent is available for review by the Editor-in-Chief of this journal.

References