Inter-arytenoid Schwannoma: Case Report and Literature Review

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ABSTRACT

Schwannomas are benign tumors arising from nervous system tissues. They are often found in the head and neck region, with 25% to 45% of schwannomas occurring in the head and neck area. Approximately 45% of all neurogenic tumors are found in the head and neck, with parapharyngeal space being the most common site. Laryngeal location is rare, and along with neurofibromas, schwannomas comprise only 0.1-1.5% of all benign laryngeal tumors. In this case report, we present a rare case of a laryngeal schwannoma located in the inter-arytenoid region. The diagnosis of schwannoma is made histologically with the presence of a clear capsule and characteristic histologic features (i.e., Antoni A and Antoni B areas) or immunoprofile. Treatment of this lesion is complete surgical resection. At least one case report of incomplete excision leading to re-growth of the tumor was found in the literature.

INTRODUCTION

Schwannomas are neurogenic tumors, arising from perineural Schwann cells. They are well encapsulated, and grow adjacent to the parent nerve, but extrinsic to nerve fascicles. Approximately 45% of all neurogenic tumors are found in the head and neck, with parapharyngeal space being the most common site. Laryngeal location is rare, and along with neurofibromas, schwannomas comprise only 0.1-1.5% of all benign laryngeal tumors. Literature suggest that 80% are located in the aryepiglottic fold, while 20% are found in the false or true vocal cord. They are almost always submucosal, and are thought to arise most commonly from the internal branch of the superior laryngeal nerve.

RESULTS

Figure 1: 70 degree rigid endoscopy revealed a submucosal lesion centered in the inter-arytenoid regions, preventing full closure of TVFs.

Operative Findings

Figure 3: lesion was exposed through a large Ossoff-Pilling laryngoscope with the endotracheal tube suspended anteriorly

Figure 4: mucosal incision was made with an AcuBlade micromanipulator CO2 laser down to the capsule of the mass. Mucosal flaps were elevated and the mass was dissected free. 6-0 Vicryl interrupted suture was used to re-approximate the flaps

Figure 5: Lesion was removed in its’ entirety and was noted to have a smooth capsule and firm, homogenous parenchyma.

Case Report

A 38 year old male referred to UCSF Voice and Swallowing Center with 6 months of intermittent hoarseness, with worst quality in the mornings. No swallowing or breathing difficulties, denies pain or globus sensation. 4 pack year tobacco history, quit 10 years prior

CONCLUSIONS

Laryngeal schwannomas are rare, benign, well encapsulated tumors. Modern endoscopic techniques with wide exposure and surgical precision allows submucosal dissection and complete excision. Open procedures, with increased morbidity including perioperative tracheotomy and postoperative dysphonia, should thus be avoided when possible.

REFERENCES


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