Schwannoma of the floor of the mouth

YADRANKO DUCIC, MD, FRCS(C), FACS, Dallas and Fort Worth, Texas

Schwannomas, or *neurilemmomas* (as they are occasionally called), typically present as firm, encapsulated masses with a solid to partly cystic gross appearance. These benign neoplasms originate from Schwann cells, which develop during the fourth week of gestation during the ectomesenchymal detachment of the neural crest. They subsequently form an envelope around extracranial nerve fibers, providing them with a layer of myelin to improve the propagation of signals along the nerves. Schwannomas may arise anywhere in the body, but they have an affinity for the head and neck region and extremities. In fact, 25% of all schwannomas arise within the head and neck region.[1] However, only a few cases of such tumors have occurred in the oral cavity.[2-5] All previous oral cavity schwannomas had prominent involvement of the tongue, which facilitated diagnosis in those patients. In this case report, I present an isolated floor of mouth lesion with subtle clinical findings.

CASE REPORT

A 42-year-old male presented for evaluation of progressively worse snoring for 1 year. He did not report any odynophagia, dysphagia, or dysphonia. His surgical and medical history was not significant; in fact, he was in excellent health otherwise. Specifically, he had a negative family and personal history of any neurologic disorders or neoplasms. Examination revealed that he was a well-nourished male in no apparent distress. He did have some fullness in the floor of the mouth and submental region that was soft in consistency. Nasopharyngolaryngoscopy revealed the presence of retrodisplacement of the base of the tongue with narrowing of the airway at this level, as evidenced on Müller's maneuver. A CT scan of the neck, performed to further evaluate the fullness in the floor of mouth, revealed a large cystic lesion consistent with a possible ranula (Fig 1). An incidental note was made of a large, calcified left thyroid mass. The patient subsequently underwent a left hemithyroidectomy that revealed a benign adenoma. A submental approach was used to gain access to the patient's floor of the mouth lesion. After the mylohyoid and anterior digastric muscles were split, a firm, encapsulated mass with no apparent attachment to the lingual or hypoglossal nerves was removed in toto through careful dissection. The patient's postoperative course was uneventful, with resolution of his snoring and normalization of the positioning of the base of the tongue to a more anterior location. The pathologic specimen was consistent with a benign nodular schwannoma, measuring 6.5 cm in maximal dimension. On microscopic examination, the specimen was noted to be composed of spindle cells with regular, elongated nuclei and moderate amounts of fibrillary eosinophilic cytoplasm (Fig 2). The nuclei palisaded and alternated with acellular fibrillary areas, giving rise to well-defined Verocay bodies. The interlobular septa contained similar spindle cells within a myxoid stroma.

DISCUSSION

Schwannoma of the oral cavity is an exceedingly rare entity. The case described here illustrates the potential for an indolent progressive course with subtle clinical findings. The diagnosis was not suspected until microscopic examination had been completed. There are 2 distinct patterns of schwannoma, namely, Antoni A and Antoni B. The former is characterized by a highly cellular pattern organized in palisading fascicles with little stromal matrix. By contrast, the Antoni B pattern exhibits a less cellular, more irregular growth pattern within a myxoid

From the Department of Otolaryngology–Head and Neck Surgery, University of Texas Southwestern Medical Center and the Division of Otolaryngology and Facial Plastic Surgery, John Peter Smith Hospital.

Reprint requests: Yadranko Ducic, MD, FRCS(C), FACS, Director, Otolaryngology and Facial Plastic Surgery, John Peter Smith Hospital, 1500 South Main Street, Fort Worth, TX 76104; e-mail, yducic@aol.com.

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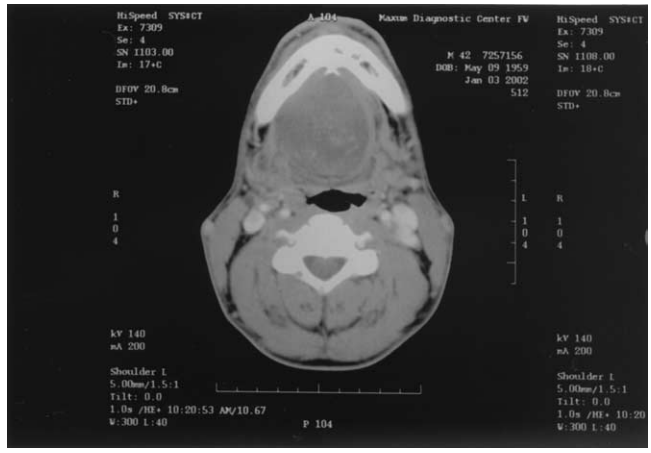

Fig 1. Preoperative axial CT scan of the neck demonstrates an apparent cystic lesion occupying much of the floor of the mouth.

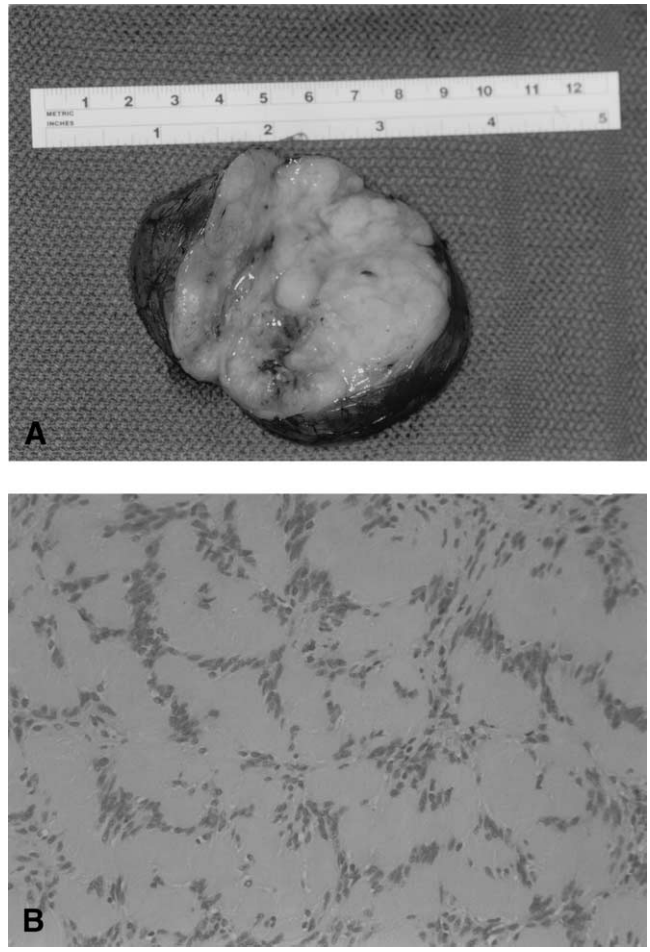

Fig 2. (A) Gross appearance of a completely excised 6.5-cm tumor. **(B)** Photomicrograph demonstrates the typical palisading nuclei arranged around acellular fibrillary areas that is typical of schwannomas (hematoxylin-eosin stain, original magnification ×40)

stroma. Schwannomas may not be accurately diagnosed or suspected preoperatively unless the patient has a personal history of such a tumor or there is a personal or family history of other neural lesions, as in von Recklinghausen's disease. Schwannomas are generally slow-growing lesions with little potential for malignant degeneration or recurrence. Obviously, the natural history of oral cavity schwannomas has not been fully elucidated because of the paucity of patients with this diagnosis. Complete surgical excision appears to be the treatment of choice.

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