Synovial Sarcoma of the Tongue: Report of a Case

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This report outlines the workup and management of a 55-year-old woman with a synovial sarcoma of the lateral border of the tongue that was initially diagnosed as a glomus tumor. A review was performed of the literature on synovial sarcomas of the oral cavity and current National Comprehensive Cancer Network guidelines. Synovial sarcomas of the tongue are rare neoplasms, with variable morphologic microscopic types and immunohistochemical profiles. Fluorescence in situ hybridization analysis of the known gene translocation also can be used in diagnosis. According to the literature, resection of the tumor is the current treatment of choice; however, owing to the rarity of this entity, diagnosis and management prove challenging for the oral and maxillofacial surgeon.

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Synovial sarcomas of the oral cavity are rare, and diagnosis of these tumors is complicated by their varied microscopic morphology and immunohistochemical profiles. This case report describes the diagnosis and management of a 55-year-old woman with a synovial sarcoma of the right lateral border of the tongue that was initially diagnosed as a glomus tumor. The histology and treatment of these 2 tumors are reviewed.

Report of Case

The patient was a 55-year-old woman referred by her general dentist to the University of Washington (UW) oral and maxillofacial surgery (OMS) clinic. The patient noticed a 2- × 2-cm nonpainful ulcerated lesion on the right lateral border of her tongue 1 month before presentation, which she believed to be a "canker sore." The lesion was biopsied at UW and the histologic examination showed a collection of small, round blue cells arranged in small nests surrounded by a rich vascular network that included dilated branching vessels (Fig 1). High mitotic activity was observed and the cells expressed smooth muscle actin by immunohistochemistry. After review by multiple pathologists, including an oral and maxillofacial pathologist, the working histologic diagnosis was an atypical glomus tumor. Subsequently, the patient was referred to the Harborview Medical Center (HMC) OMS clinic for further evaluation and management.

At presentation to the HMC OMS clinic, the patient reported mild pain and intermittent paresthesia of the right tongue since the biopsy. Intraoral examination showed a 2- × 2-cm mass in the right anterior border and ventral surface of the tongue with an intact epithelial surface, except for the previous biopsy site (Fig 2). The mass was solid and painless on palpation. The floor of the mouth was soft, nontender, and nonelevated. There was no cervical adenopathy and cranial nerves II to XII were intact bilaterally. Magnetic resonance imaging (MRI) showed a 2- × 2-cm mass involving the right tongue and crossing the midline (Figs 3-5). Given the histologic findings of glomus tumor, computed tomographic angiography of the neck was performed with concern for increased vascularity. However, the lesion was not well visualized and streak artifact obscured the supply to the tumor. At the recommendation of interventional radiology, a magnetic resonance angiogram of the neck was obtained the same day and showed that the lesion was supplied bilaterally by hypertrophic

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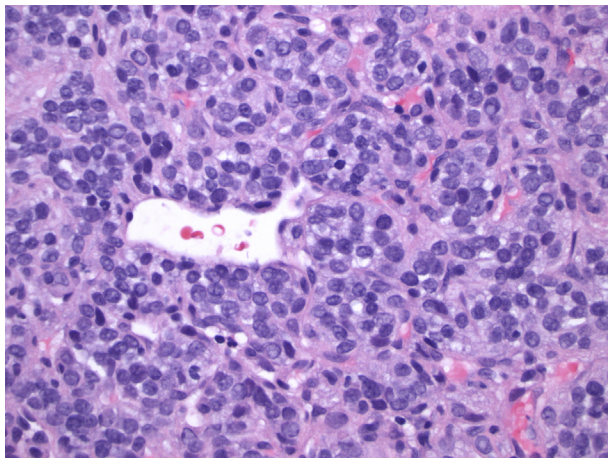

FIGURE 1. Initial pathology. Note small round cells arranged in small nests surrounded by a rich vasculature reminiscent of a glomus tumor.

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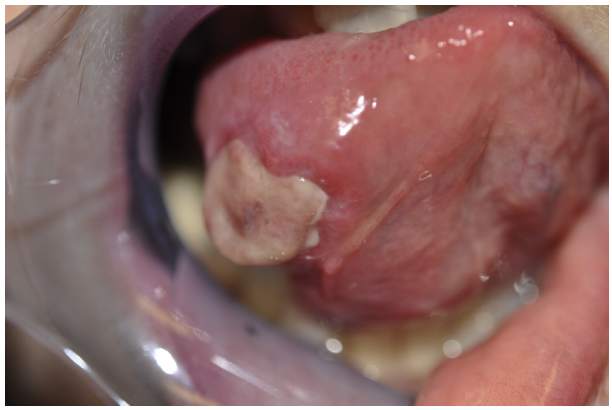

FIGURE 2. Initial presentation, mass in the right anterior border and ventral surface of the tongue with an intact epithelial surface.

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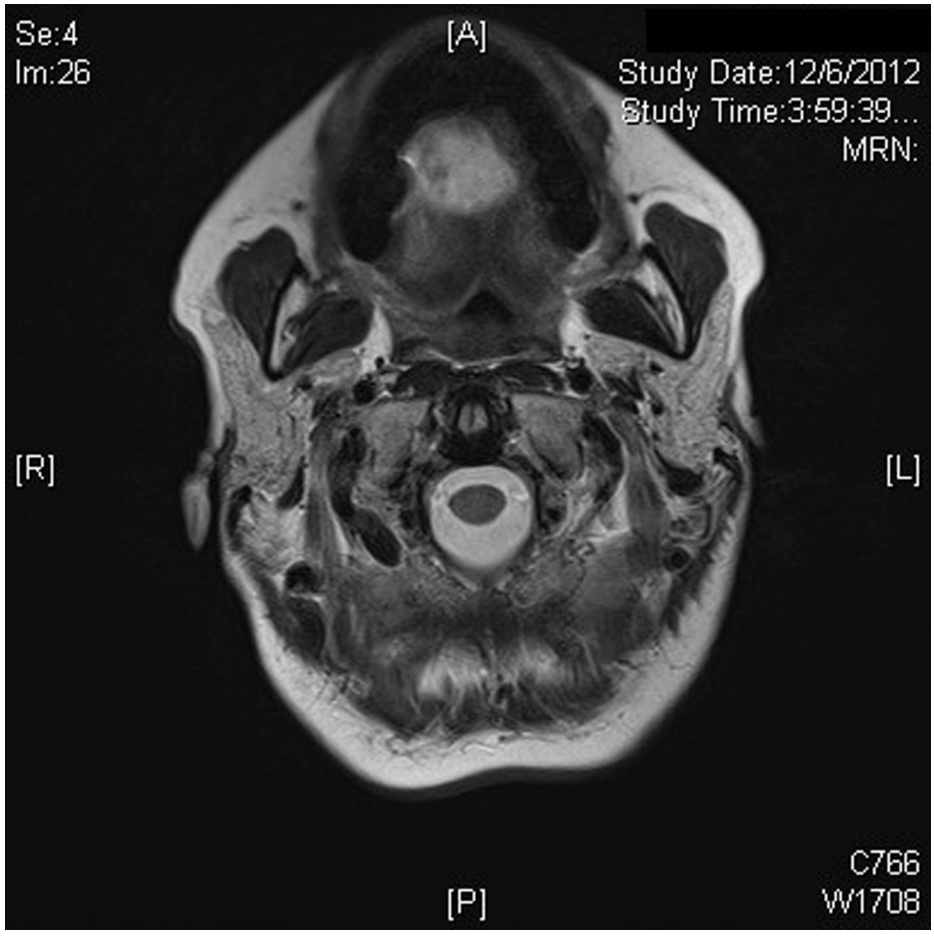

FIGURE 3. Preoperative T1-weighted magnetic resonance image—axial cut showing a 2- 2-cm mass involving the right tongue and crossing the midline.

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