Schwannoma of the tongue

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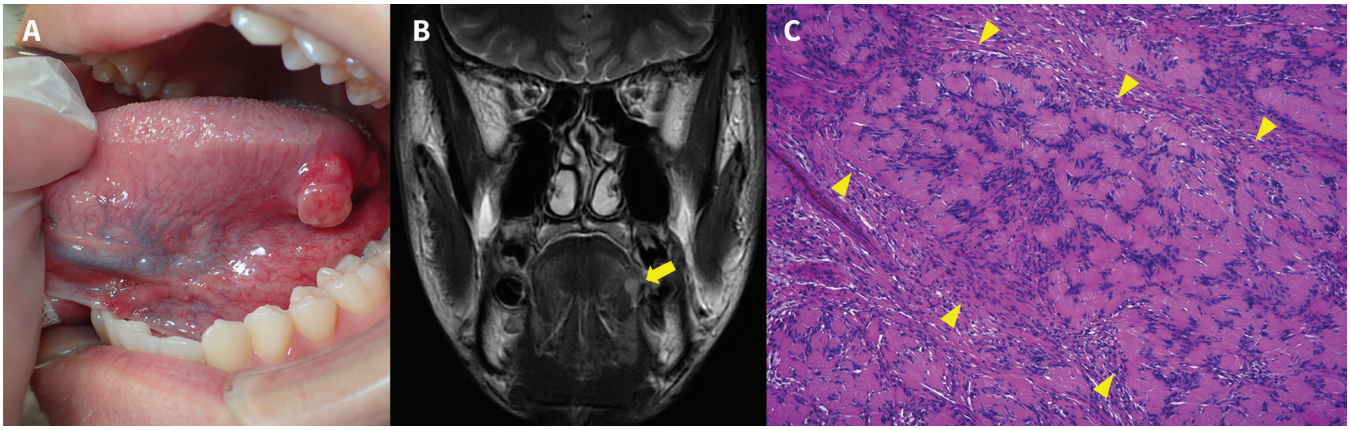

Figure 1: (A) Photograph of a well-circumscribed, elastic 14 × 9 mm mass on the left lateral border of the tongue in a 17-year-old male with schwannoma. (B) Magnetic resonance imaging scan showing a well-defined lesion that was hyperintense on T_2-weighted imaging (arrow). (C) Histopathological examination with hematoxylin and eosin staining showing hypercellular spindle cell regions (arrows) in a palisading arrangement (Antoni A) (magnification × 100).

A healthy 17-year-old male presented with a 2-week history of pain in his left lateral tongue. Intraoral examination showed a well-circumscribed, elastic 14 × 9 mm nodule on the left lateral tongue with tenderness to palpation (Figure 1A). Extraoral examination did not show any cervical lymphadenopathy. Magnetic resonance imaging (MRI) showed a well-defined lesion in the left lateral tongue that was isointense relative to the muscle on T_1-weighted imaging and hyperintense on T_2-weighted imaging (Figure 1B). Histopathological examination of an incisional biopsy showed hypercellular spindle cell regions in a palisading arrangement (Figure 1C). Immunochemistry results were positive for S100 and Sox10 markers. The mass was completely excised. No evidence of recurrence was found 10 months after surgery.

A schwannoma is a benign tumour derived from Schwann cells of the nerve sheath.[1] Between 25% and 45% of schwannoma cases occur in the head and neck.[1] Schwannomas rarely occur in the oral cavity, but when they do the tongue is most frequently affected.[1] Tongue schwannomas are usually seen in patients 20–40 years of age, with no predominance by sex.[1] The lesions are slow growing and are usually asymptomatic submucosal nodules, although larger tumours in the posterior tongue may cause pain, dysphagia and dysphonia.[1] Identifying the nerve origin of oral schwannomas is difficult because most of the lesions originate from smaller nerves.[2] Computed tomography shows well-circumscribed, dense, homogeneous masses, and MRI is used for detailed examination.[1] Schwannomas have 2 different histological features. Antoni A areas are characterized by hypercellular spindle cells in a palisading arrangement; Antoni B areas are hypocellular, disorganized cell regions.[1–3] S100 and Sox10 are useful immunohistochemical markers for diagnosing peripheral nerve sheath tumours.[4] Both S100 and Sox10 are used to identify neural crest differentiation, but Sox10 is a more specific marker than S100. Complete excision of schwannomas is the standard treatment. Recurrence and malignant transformation are very rare.[1] All tongue lesions, even in young people, should be biopsied or excised because malignancies are possible, though uncommon.

References

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