

Clinical Image

Submandibular Gland Lipoma: An Uncommon Location

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Lipomas, usually benign fatty tissue tumors, are common in adults. However, lipomas originating in major salivary glands are rare, comprising up to 5% of salivary gland tumors [1]. Submandibular gland lipomas are even less common [3], primarily affecting men over 30, with a 10:1 male-to-female ratio [1].

Our case involves a 51-year-old patient who has been experiencing painless swelling in the right submandibular area for the past two years, with no impact on their overall health. The clinical examination revealed a non-painful, mobile, and soft mass in the right submandibular region, with unaffected skin and no signs of inflammation.

An initial ultrasound showed a well-defined, rounded, hyperechoic mass within the right submandibular gland, which was non-vascularized. Subsequent MRI imaging revealed an oval, well-defined formation occupying the lower 2/3 of the right submandibular gland. This formation appeared hyperintense on both T1 and T2 weighted images (Figure A, B) was suppressed on the FATSAT sequence (Figure C), showed no diffusion restriction (Dwi) (Figure D), and did not enhance after gadolinium injection (Figure E, F). Its dimensions were measured at 53x31x46mm. Importantly, this formation did not affect adjacent structures, including the facial artery, thyrolingual facial trunk, and muscular structures.

Patients with intraglandular lipomas typically develop a painless, slowly growing mass in the submandibular area. Lipomas are soft, compressible masses with normal skin covering them. However, clinical diagnosis is often missed [4]. Imaging plays a critical role in preoperative diagnosis and surgical planning for lipomatous tumors, helping to assess for malignancy [2].

Simple ultrasonography can help detect hyperechoic, elliptical or rounded masses near the skin's surface [4]. However, for a more accurate assessment of texture, location, and distinguishing lipoma from liposarcoma, Computed Tomography (CT) and MRI are superior to ultrasonography [2].

MRI showed a well-defined lipoma with a consistent high-intensity signal on T1- and T2-weighted images and a low-intensity signal on STIR sequences. CT examination displayed low intensity (-50 to -150 HU), similar to fatty tissue [1].

While most lipomas can be monitored without intervention, surgical removal is necessary in cases of diagnostic uncertainty, palpable irregularity, large size (>10cm), rapid growth, pain, deep-seated location, or cosmetic concerns [3,4].

In summary, the diagnosis of intraglandular lipomatous tumors can typically be established through patient history, physical examination, and imaging [2].

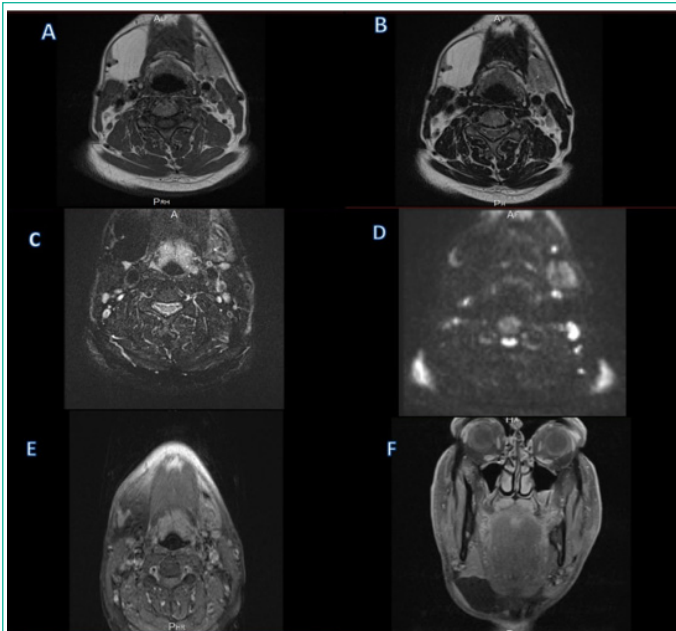


Figure 1: Cervicofacial MRI.

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