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A Rare Case of Tonsillar Lipoma

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Significance Statement

Tonsil lipomas are very rare benign masses reported as cases in the literature. Although they are slow growing benign masses, they can obstruct the airway and mix with different masses of the tonsils. Radiology plays a very important role in diagnosis and differential diagnosis.

A 40-year-old female patient presented with complaints of pain, fullness, and decreased hearing in the left ear. The patient had no known disease, trauma, or surgery in her medical history. On examination, the uvula was pushed to the right, and on otoscope examination, the eardrum was ruptured and there was discharge. Temporal bone computerized tomography (CT) was taken to the patient. There were findings supporting chronic otitis media in the images obtained. Apart from these, 14×16×20 mm in size hypodense well-circumscribed lesion was detected in the left palatine tonsil. The density of the lesion in question was -87 HU (Hounsfield unit) on average. In this state, the patient underwent contrast-enhanced neck magnetic resonance imaging (MRI). A well-circumscribed lesion was detected in the left palatine tonsil, which was hyper-intense on T1-weighted images, suppressed on fat-suppressed sequences, and iso-intense with adipose tissue on T2-weighted images. The lesion did not restrict diffusion and did not contrast-enhance in postcontrast sections (Figure 1). Biopsy and operation was recommended to the patient, but she did not accept. A diagnosis of tonsillar lipoma was made radiologically and was followed up.

The basal layer of the tonsils consists of abundant lymphoid tissue and is bereft of adipocytes. Benign tumors of the palatine tonsils are rare and usually polyp-shaped. The most common benign polyps are squamous cell polyps and lymphangiomas. Lipomas are the most common mesenchymal tumors of the body and are less common in the head and neck region (15%).[1] Those seen in the head and neck region are usually located in the subcutaneous tissue. Tonsillar lipoma is extremely rare in the literature and has been shown as a limited number of cases.[1,2]

Tonsillar lipomas can be seen at almost any age (8–83 age) and there is no gender dominance. The patients are usually asymptomatic and the lesions are detected incidentally, as in our case. Symptoms may include pain, cough, excessive salivation, voice change, chronic tonsillitis, foreign body sensation, respiratory distress, positional sleep apnea, and angina.[2] Although histopathology is the gold standard in diagnosis, radiological imaging also provides benefits. Lipomas show an average of -65 to -120 HU on CT. While lipomas, which are well-circumscribed benign lesions, have high intensity in T1-weighted sequences on MRI, it is important to suppress them in fat-suppressed sequences.[3] Surgery is performed in symptomatic patients. Generally, tonsillectomy is performed, and lipoma and stalk removal can also be applied. No recurrence has been observed in the literature.[1,4]

Declaration of Conflicting Interests

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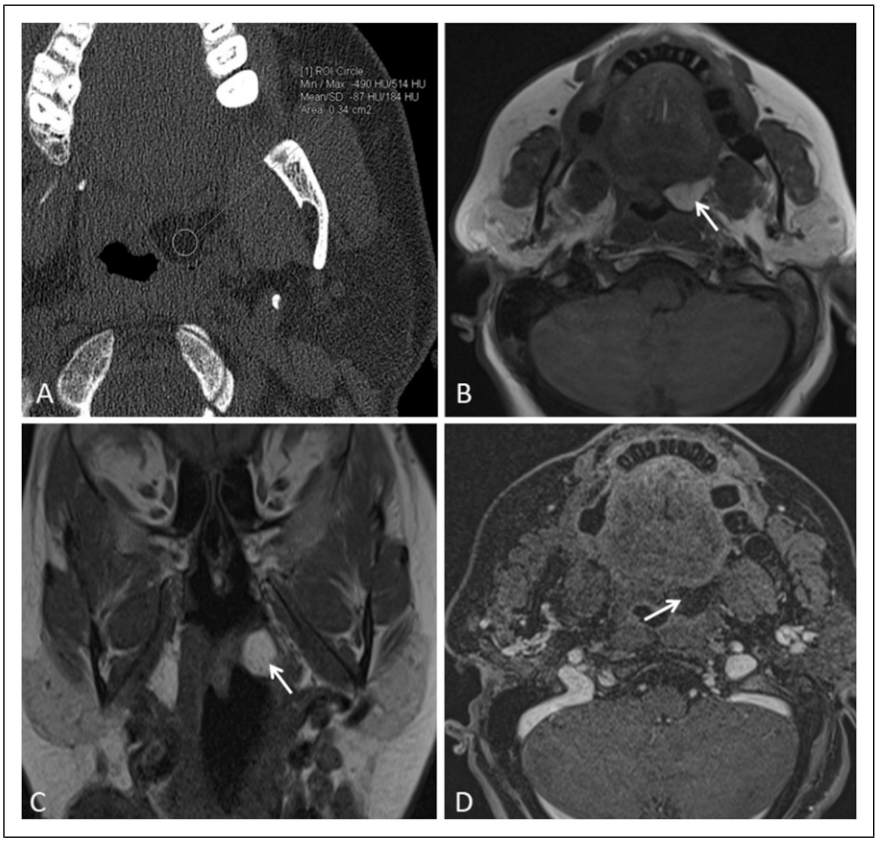

Figure 1. A well-defined hypodense, fat-density lesion is observed in the left palatine tonsil in the axial sectional non-contrast computerized tomography image (A) of the patient. The lesion appears hyper-intense on axial (B) and coronal (C) section T1-weighted images (arrows). On the fat-suppressed T1-weighted postcontrast image (D), the lesion is suppressed and not enhanced.

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