

## **Tonsillar Lipoma: A very familiar tumor at an extremely unusual location**

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### **Abstract**

Lipomas are benign, slow-growing soft tissue tumors composed of mature adipocytes. Despite of their high prevalence, they are rarely seen at the upper aero-digestive tract. Lipoma formation in palatine tonsil is quite rare (1-4% of all benign neoplasm of this location) and worldwide very few cases have been reported in medical literature so far. In this article we report a rare case of palatine tonsil lipoma in a 24 years old male patient and the review of the related literature.

**Keywords:** Palatine Tonsil, Lipoma, Tonsillar Lipoma.

### **1. Introduction**

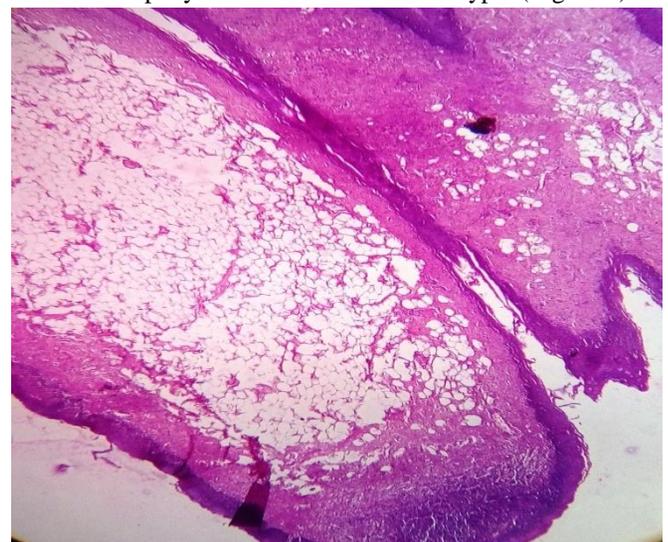
Lipomas are common benign mesenchymal tumors that can arise wherever fat can normally present. They tend to be slow growing and peak incidence being the 5<sup>th</sup> to 6<sup>th</sup> decade of life [1,3]. Over 10% arise in head and neck region, usually in the immediate subcutaneous tissue; among which only 1-4% are noted within oral cavity [1,2]. In oral cavity; buccal mucosa, mouth and tongue are the frequent sites [1]. Lipomas originating from the tonsil are especially unusual. Since, tonsillar lipomas do not cause severe symptoms; they are diagnosed incidentally and treated surgically only for cosmetic reasons [1-3]. Here we present a case of tonsillar lipoma to highlight the presence of this rare entity.

### **2. Case Report**

A 24 year male patient, attended the otolaryngology clinic with complain of throat discomfort which he described as a feeling of something stuck in his throat. There was no history of pain, fever and change of voice quality. The patient had no contributory past medical history. On clinical examination, a well-defined, small, mobile, non-tender, intraglandular polypoid growth noted, arising from the upper pole of left sided tonsil, measuring 1x1 centimeters.

Elective excision of the polyp was performed and the excised tissue was sent for pathological examination. Grossly, the tissue was described as thinly encapsulated, polypoid mass, measuring 1.2x1x0.5 centimeters with a, soft, yellowish, homogenous cut surface.

Microscopically, histological sections of the tissue revealed a well circumscribed, encapsulated tumor composed of mature adipocytes with no evidence of atypia (Figure 1).



**Figure 1: Photomicrograph of polypoid tonsillar mass showing lobules of mature adipocyte beneath the lymphoid follicles. (H&E, x100)**

The cells were arranged in lobules. A rim of lymphoid tissue remained at the periphery of the lesion. The diagnosis of lipoma was made based on the histopathological features (Figure 2). Routine follow up revealed no residual abnormality.

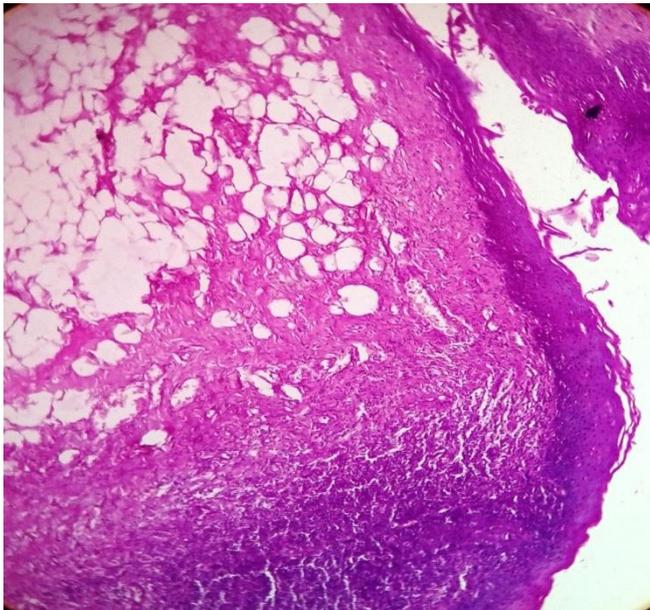


Figure 2: High power view of the same. (H&E, x400)

### 3. Discussion

Tonsillar tissue histology consists of a combination of centrally-localized lymphoid tissue and epithelial tissue composed of squamous cells covering crypts and all surfaces [3]. There is no adipose tissue in this combination; therefore, Lipomatous tumor incidence is quite low in the tonsil [4-6].

Lipomas are composed of mature adipocytes and are frequently encountered benign mesenchymal tumors, because they can originate anywhere within the body where adipose tissue is located [7,8]. Generally, their prevalence does not differ with gender, although a male predilection has been recorded [9]. These tumors can be seen in the buccal sulcus, tongue, floor of mouth and lips more, than the lower pole of the tonsil and hypopharyngeal walls [3]. In addition to squamous papilloma, the other benign tumors such as adenoma, lipoma, chondroma, hamartoma and teratoma should be considered as the differential diagnosis of benign tonsillar tumors [6-9].

The etiology is unknown. However, it is thought that trauma may trigger proliferation of fatty tissue and cause lipomas[2]. Clinically, tonsillar lipomas are slow growing painless masses and patients commonly present with a well-circumscribed mass that have been developing for several years, but they may manifest symptoms such as voice change, dysphagia, soreness, excessive salivation or foreign body sensation as in our reported case. Furthermore, when they reach an important size, these tumors may cause respiratory obstruction [1-3]. Dereköy *et al*[5] defined a case of tonsil lipoma that was 3.6 centimeters in length and caused dyspnea, hypoxemia and respiratory acidosis.

Although magnetic resonance imaging and computerized tomographic scans are very useful in the clinical diagnosis, the histopathology remains the gold standard in the diagnosis of lipomas[2]. On histological analysis, lipomas can be classified as simple/classic lipoma,

fibrolipoma or angiofibrolipoma based on the varying amount of fibrous tissue, capillaries and/or lymphatics[1]. Differential diagnosis includes other benign tumors of the tonsils such as papilloma, which represent the most common neoplasm of the tonsils [9].

Although extremely rare, malignant change in lipoma was described. Saddik *et al* reported one case of an under-diagnosed liposarcoma of the tonsillar fossa [5]. Therefore, histopathological evaluation of this kind of tumor is very important. Surgical excision is the usual mode of treatment in symptomatic cases [4]. Recurrence is unusual and the prognosis is excellent, although the documentation of follow up and data on the incidence of recurrence are not clear cut.

We report this case to raise the level of awareness of this benign lesion in the tonsil and to emphasize the importance of appropriate histopathological evaluation.

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