CASE REPORT

Ectopic tonsil in the floor of the mouth: A case report

Amanj Saber
Department of Otolaryngology, Faculty of Medicine and Health, Örebro University, Örebro, Sweden

ABSTRACT
Tonsil tissue not located at known anatomical locations at the entry of aero-digestive system is called ectopic tonsil. This is rarely presented clinically and may lead to diagnostic confusion when encountered. The diagnosis of ectopic tonsil is challenging as it is usually asymptomatic and requires histopathological examination for definitive diagnosis. A case of patient with sublingual ectopic tonsillar tissue is described here. Otolaryngologists colleagues are encouraged to pay attention to this entity and consider it in the differential diagnosis of an unclear lump in the head and neck region especially, in the oral cavity.

ARTICLE HISTORY
Received 31 March 2021
Revised 9 April 2021
Accepted 18 May 2021

KEYWORDS
Ectopic; tonsil; lump

Introduction
The ectopic tonsil is a rare entity as it is usually asymptomatic and becomes easily overlooked and unnoticed. The condition is usually painless, and it’s therefore difficult to establish a clinical diagnosis. In the literature, there are few reported cases, most frequently located at the floor of the mouth, followed by the soft palate and ventral surface of the tongue [1]. Ectopic tonsil has been even reported in the nasal septum and larynx [2,3] and in the orbital cavity [4]. The ectopic tonsil may cause diagnostic confusion, especially when found on the floor of the mouth. Usually, ectopic oral tonsil remains asymptomatic, but surgical removal is indicated to establish a tissue diagnosis. Furthermore, it may become inflamed, thus requiring immediate resection [4].

Case report
A 59-year-old female patient, referred by a public dental practitioner for assessment of a lump on the floor of the mouth that has been found during a routine examination. The patient has not noticed it before. The lump was asymptomatic without any direct subjective complaints. The patient was well with good general condition apart from taking medications for gastroesophageal reflux. According to the patient’s medical records, she has previously reacted to amoxicillin and clarithromycin with urticaria and itching.

Clinical examination revealed about 1 cm large non-fluctuating, non-tender evenly soft submucosal mass on the floor of the mouth, just under and to the left side of the tongue, near the left sublingual salivary gland as seen in Figure 1. The rest of the floor of the mouth was palpated without remark. No other enlarged mass was palpable in the head and neck region. Preliminary diagnosis set as sialoadenitis of the left sublingual salivary gland or mucocele. It was decided to stick the lump with a fine needle. A small amount of yellowish secret was aspirated and sent only for bacteriological examination. Unfortunately, the aspirated secret was not examined by the pathologist and no cytological analysis was done. The patient was told that in case the mass begins to fill up, surgical removal under local anesthesia would be suggested. The culture report revealed sparse growth of the Actinomyces hongkongensis bacteria which may be part of the normal flora but can sometimes cause abscess and in rare cases even actinonomycosis. Resistance and sensitivity patterns revealed that the bacteria were sensitive to both benzyl penicillin and clindamycin antibiotics. Even though the patient had no clinical signs of infection, but since there was a certain risk for the bacteria to cause abscess, she was put on treatment with antibiotic, clindamycin for two weeks according to the recommendation of the infection’s clinic.

CONTACT Amanj Saber amanj.saber@regionorebro.se Department of Otolaryngology, Faculty of Medicine and Health, Örebro University, SE 70182, Örebro, Sweden

© 2021 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.
A few weeks later, the patient contacted the clinic, because the mass was filled again, still had no direct subjective complaints from the lump. Follow-up examination revealed the same finding. Surgical removal under local anesthesia was suggested and the patient agreed to be operated on to get rid of the mass. On the operation’s day, the patient complained that the lump has become a little bigger in size. On examination, it was about 1.5 cm in diameter. It was dissected out carefully. It was located medial to the sublingual salivary gland. During excision few drops of yellowish secret came out, and then a soft tissue mass dissected out in two pieces. After homeostasis was achieved, the wound was closed with absorbable sutures. Immediate postoperative course was uneventful, but on the 8th day postoperatively, the patient was in contact with the clinic because she has got pain and discomfort in the oral cavity. She has been able to eat and drink as usual, had no fever, but she felt an unpleasant feeling and bad odor from the mouth. Follow-up examination revealed no clinical signs of infection. Sublingually there was a sign of wound-healing process. Saline rinsing of the mouth after meals was recommended.

The histological examination revealed a mass of two pieces (12 × 6 × 4 mm) and (4 × 2 × 2 mm) respectively being composed of reactive lymphoid tissue. Microscopically, mucosa was covered with stratified squamous cells without dysplasia, with abundant intraepithelial lymphocytes. In the submucosal stroma, a lymphocytic infiltrate with different germinal centers was seen. No histological findings of salivary gland or mucocele were seen. No evidence of cellular dysplasia nor malignancy were exhibited. The histopathological findings suggest that the resected mass with reactive lymphoid tissue was ectopic tonsillar tissue.

Three weeks postoperatively, the patient was informed about the histological findings and the benign nature of the lump. At that time the wound has healed completely without any complications.

**Discussion**

Ectopic tonsil is rarely encountered in clinical practice. Few cases are reported in the literature. This may be due to the fact that when these are small in size do not attract attention [4] and usually passes unnoticed both by the patients and clinician during routine examinations. But the ectopic tonsil can become larger in size as a result of inflammation or accumulation of keratin secretion and thus become noticed by the patient or clinician [4]. Excisional biopsy and histopathological examination are required to make a definitive diagnosis of ectopic tonsillar tissue.

The pathogenesis of ectopic tonsil is unclear. Lymphoid tissue has been found in fetal salivary glands and occasionally even found in the adult [5]. This can partly explain the close position of the ectopic tonsillar tissue to the sublingual salivary gland in the reported case. However, this cannot be accepted as a whole etiology as cases have been reported far from salivary glands [1]. Furthermore, it was found to be separated from the salivary gland during surgery.

The reported case was initially diagnosed as mucocele/sialoadenitis. The ectopic tonsil as a clinical entity was not encountered during the initial work-up diagnosis as the differential diagnosis of lump under the tongue or floor of the mouth are retention cyst, sialolithiasis, mucocele or ranula. This case report adds to the previous published cases and to the fact that the ectopic tonsillar tissue can present as local infection or inflammation. In the reported case there were signs of inflammation or infection as the tissue became larger in size and pus-like secretion was aspirated from the

![Figure 1. Lump on the left side of the floor of the mouth (arrows).](image-url)
lump. Moreover, the bacteriological findings on culture and sensitivity examination confirm the fact that ectopic tonsillar tissue may become inflamed or infected, thus requiring immediate management [4].

The condition is reported in both male and female patients [1–6]. It is not clear whether the condition is more common among some populations group or at certain geographical sites than other but most of the cases being reported from Japan [1,2,5,6]. Further studies are needed to outline this observation. Another interesting observation is the fact that most of the reported cases have been seen and reported by dentists and faciomaxillary surgeons and published in oral or dental medical journals. This confirms the fact that the condition is often overlooked and unnoticed by the Otolaryngologists as the patients do not have complaint. Here, Otolaryngologist colleagues are reminded about the existence of this clinical entity and to consider ectopic tonsillar tissue in the differential diagnoses of unclear lump in the oral cavity.

Informed consent statement

The patient’s data have fully anonymized. Written informed consent for publication of the case report was obtained from the patient.

Disclosure statement

No potential conflict of interest was reported by the author(s).

ORCID

Amanj Saber  
http://orcid.org/0000-0002-4141-4256

References

[1] Kimura M, Nagao T, Saito T, et al. Ectopic oral tonsillar tissue: a case series with bilateral and solitary presentations and a review of the literature. Case Rep Dent. 2015;2015:518917.
[2] Furukawa M, Takeuchi S, Umeda R. Ectopic tonsillar tissue in the nasal septum. Auris Nasus Larynx. 1983;10(1):37–41.
[3] Thomas AM, Varghese N, Menon AG. Ectopic tonsillar tissue presenting with bilateral arytenoid swelling: a case report. Int J Adv Med Health Res. 2015;2(2):134–136.
[4] Patel K, Ariyaratnam S, Sloan P, et al. Oral tonsils (ectopic oral tonsillar tissue). Dent Update. 2004;31(5):291–292.
[5] Mogi K. Ectopic tonsillar tissue in the mucosa of the floor of the mouth simulating a benign tumour. Case report. Aust Dent J. 1991;36(6):456–458.
[6] Kashima K, Takamori K, Igawa K, et al. Oral tonsil in the floor of mouth: ectopic oral tonsillar tissue simulating benign neoplasms. Oral Sci Int. 2012;9(1):29–31.