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UNILATERAL TONSIL ENLARGEMENT MIMICKING MALIGNANCY: A CASE REPORT

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ABSTRACT

Unilateral Tonsil Enlargement (UTE) can present clinically as a significant challenge in differentiation between benign and malignant processes. The suspicion of malignancy increases in older patients who are symptomatic. The purpose of this study was to show that unilateral tonsillar hypertrophy does not always indicate malignancy. A 51-year-old woman presented with a recurring sore throat, but it has been persistent for the past 1 month. A globus sensation accompanied the complaint. On Ear, Nose, and Throat (ENT) examination, the right tonsil grade was T2 and the left tonsil was T4, hyperemic, with dilated crypts. The patient was referred before with a working diagnosis of unilateral tonsil hypertrophy suspect malignancies, with a planned tracheostomy. The literature search was conducted on PubMed, Cochrane, Scopus using keywords "unilateral tonsil enlargement" and "tonsil hypertrophy" and "tonsil asymmetry" in the last 10 years. Based on the investigation, it was found that tonsillectomy for asymptomatic Unilateral Tonsil Enlargement does not need to be performed immediately. Given that the occurrence of malignancy in asymmetrical tonsils is minimal in the absence of additional risk factors, a period of watchful waiting may be deemed appropriate before considering any surgical intervention. It is recommended to observe for four weeks.

Keywords: unilateral tonsil enlargement, tonsil hypertrophy, tonsil asymmetry, tonsillectomy

INTRODUCTION

Unilateral tonsillar hypertrophy can be due to several causes (Akgül et al., 2023). There are several etiologies behind unilateral tonsillar enlargement, including tuberculosis, actinomycoses, syphilis and sarcoidosis, chronic inflammatory response, papilloma, reactive immunological response to a nearby primary tumor in cervical lymph node and malignancy. Furthermore, asymmetric tonsils could be a normal variant due to varying depth of tonsillar fossa or asymmetry in anterior pillars (Kulali et al., 2023).

Malignancy of the tonsils has an annual incidence of 0.5% of all new malignancies in the United States and thus represents a small number of head and neck malignancies (Bajpai et al., 2021). The most common and important two types of tonsillar malignancy are squamous cell carcinoma and lymphoma It is the possibility of tonsillar malignancy that alerts us when confronted with a unilateral tonsillar enlargement (Kynaston et al., 2021).

Tonsillectomy is among the most commonly performed operations in Otorhinolayngology (ORL) classified into absolute and relative indications (Fleming & Hackman, 2024). Malignant tumors of the tonsil are one of the definitive indications for tonsillectomy (Vaddi et al., 2023a). Suspected tonsillar malignancy cannot be confirmed except after a biopsy is done, usually tonsillectomy (Thomas et al., 2024). Asymptomatic unilateral palatine tonsillar hypertrophy is usually treated with tonsillectomy for biopsy purposes in view of suspicion for underlying malignancy especially in the old-age-group (Y. H. Tan & Hishammuddin, 2022).

Case Report

A 51-year-old woman was referred to ENT outpatient clinic in Tangerang City Regional General Hospital with a working diagnosis of unilateral tonsil hypertrophy suspect malignancies, with a planned tracheostomy. The patient complained of recurring sore throat, but the current sore throat complaint has been persistent for the past 1 month. The complaint was accompanied by a globus sensation. There

was no history of fever, neck swelling, hoarseness, difficulty swallowing or difficulty of breathing. The patient denied any history of previous tooth extraction. The patient denied any history of diabetes mellitus. There was no history of surgery.

On the physical examination, the patient appeared generally well. On local examination, the right tonsil grade was T2 and the left tonsil was T4, hyperemic, crypts were widened. There was no palpable cervical lymph node. Nasal, nasopharyngeal, and laryngeal examinations showed normal findings.

Figure 1. Oropharyngeal Appearance of Tonsil Enlargement



The patient was diagnosed with unilateral tonsil hypertrophy and was scheduled to undergo a tonsillectomy procedure, under general anesthesia. After undergoing a routine examination and pre-anesthesia workup, a unilateral tonsillectomy was performed. There were no complications during the operation. The patient was hemodynamically stable and showed no abnormal findings in her vital signs during operative surgery and right after the surgery.

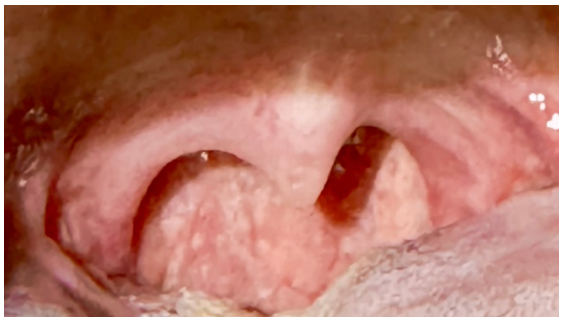
One day after the surgery, during the follow-up assessment, the patient reported no complaints except for mild discomfort when swallowing her meal. In her tonsillar fossa, there was no ongoing bleeding, blood clotting, hematoma, or laceration in the oropharynx.

During the first week after the surgery, the patient reported no complaints. She had no difficulty swallowing and experienced no pain while eating her meals. There was no history of bleeding, fever, or any sensation of a lump in her throat. A physical examination revealed minimal fibrin formation on her tonsillar fossa, but there was no active bleeding, blood clotting, hematoma, or laceration.

In the fourth week following the surgical procedure, the physical examination yielded normal findings with no complications reported. The patient was able to resume her daily activities and expressed satisfaction with the outcome.

The tonsil was sent for histopathologic examination. The histopathologic examination showed chronic hypertrophic tonsillitis with diffuse areas.

Figure 2. Oropharyngeal Appearance After Tonsillectomy



METHOD

A comprehensive literature review was conducted utilizing the PubMed, Cochrane, Scopus, and Google Scholar databases. The search employed the keywords “unilateral tonsil enlargement” and “tonsil hypertrophy” and “tonsil asymmetry” and “tonsillectomy”. The inclusion criteria were confined to publications from the previous ten years and restricted to the English language, resulting in the identification of 10 relevant works of literature.

RESULT AND DISCUSSION

Several studies suggested that the mucosa of the tonsil causes tonsillar asymmetry (Arambula et al., 2021). According to the American Academy of Otolaryngology-Head and Neck Surgery Clinical Indicator Compendium, unilateral hypertrophy of the tonsil presumed to be neoplastic is an indication for tonsillectomy, one of the most often performed operations in daily otolaryngology practice (Milinis et al., 2025).

Unilateral tonsillar hypertrophy is usually treated with tonsillectomy owing to the suspicion of underlying malignancy such as lymphoma or carcinoma (Vaddi et al., 2023b). Adults with an asymmetrical tonsil as the only concerning feature frequently undergo tonsillectomy to exclude underlying malignancy (Patel et al., 2022). The index of suspicion of a malignant process should be high in older age groups, especially if there is a history of tobacco and alcohol consumption or a past history of malignancy (Faraji et al., 2024).

Multiple studies that reported retrospectively on UTE in adult populations suggested that UTE was most associated with malignancy in the setting of other suspicious symptoms, such as cervical lymphadenopathy, the suspicious appearance of the tonsillar mucosa, and history of lymphoma (Bowers et al., 2021). The rate of malignancy in asymmetrical tonsils without associated signs and symptoms of malignancy is negligible (Campbell et al., 2024). When patients have normal findings on neck examination, the mucosa overlying the tonsil is normal, and there are no systemic symptoms, counselling patients becomes more challenging.

Otolaryngologists have to weigh the risks and complications of doing tonsillectomy versus the possibility of missing a diagnosis of malignancy (Leu et al., 2021). Diagnostic tonsillectomy is indicated in patients with asymmetrical tonsillar enlargement with associated suspicious clinical findings, including cervical lymphadenopathy and rapid tonsillar enlargement. Imaging modalities could be helpful in assessing the asymmetry of the tonsils when suspecting such finding on clinical examination.

In true asymptomatic UTE, malignancy is extremely rare. Often, these present with additional signs and symptoms that will be picked up with a comprehensive history and examination. Unless clinical suspicion of malignancy, tonsillectomy should not be performed in the first instance in patients with asymptomatic UTE (E. T. Tan et al., 2025).

Since the incidence of malignancy in asymmetrical tonsils is negligible in the absence of other associated risk factors, watchful waiting may be appropriate prior to any surgical intervention. We recommend a period of watchful observation for four weeks.

CONCLUSION

This study aimed to examine the clinical presentation and management of unilateral tonsil enlargement (UTE) and its differentiation from malignancy. The findings suggest that, despite the potential concern for malignancy, unilateral tonsil enlargement is often benign, particularly in the absence of other concerning symptoms such as cervical lymphadenopathy or rapid tonsillar enlargement. In this case, the patient, a 51-year-old woman with persistent sore throat, was initially suspected of having a malignancy due to the asymmetry of her tonsils. However, the subsequent tonsillectomy and histopathological analysis confirmed chronic hypertrophic tonsillitis, highlighting that not all cases of UTE warrant immediate surgical intervention.

The research emphasizes the importance of watchful waiting, particularly in asymptomatic cases where malignancy is unlikely. The study suggests a four-week observation period as a reasonable approach before opting for tonsillectomy. This approach aligns with findings from existing literature that indicate malignancy in asymmetrical tonsils without additional risk factors is extremely rare. Therefore, unless other symptoms arise, such as neck masses or rapid tonsillar enlargement, tonsillectomy should not be the first line of action for unilateral tonsil hypertrophy, and a conservative observation period is often sufficient.

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