CASE REPORT

# A Rare Cause of Unilateral Tonsillar Enlargement

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## Abstract

Intratonsillar abscess is a rare entity of tonsillar disease. It is defined as focal areas of neutrophils and necrotic debris within the parenchyma of the tonsil. To date, only 48 cases have been reported including the case report and case series so far from our literature review. It was found to mainly occur in young age of less than 20 years old. It is important not to be overlooked as one of the differential diagnoses of unilateral tonsillar hypertrophy especially in the elderly age-group. The treatment modalities may vary among centers for which there is no gold standard treatment for the intratonsillar abscess. This is a case report of intratonsillar abscess in a 68-year-old man. In this case, incision and drainage were performed with 1 week intravenous antibiotic coverage. Patient had complete resolution of symptoms after 5 days of treatment. The purpose of this study is to discuss on the rarity of the intratonsillar abscess in elderly male and treatment modality in intratonsillar abscess.

**Keywords:** Case report, Globus sensation, Hoarseness, Intratonsillar abscess, Tonsillar disease.

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## Background

Unilateral tonsillar hypertrophy can be due to several causes. 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.[1] Intratonsillar abscess is a rare entity and rare differential diagnosis of unilateral tonsillar hypertrophy. Sometimes it can be overlooked as it may present as asymptomatic swelling. There are limited literatures on cases of intratonsillar abscess. Most of the cases reported previously were in children and young adults.[2,3] There are very few reported cases of intratonsillar abscess in adult aged group and 54 years old was the maximum age reported previously with this condition.[4] This is a case of intratonsillar abscess in an elderly male.

## Case Description

A 68-year-old Chinese gentleman with underlying history of hypertension and nonallergic rhinitis with nasal polyposis previously under our follow up was presented to our clinic with new symptoms of globus sensation and hoarseness for a 10 days duration. There was no history of sore throat, fever, odynophagia, dysphagia, dyspnea, or history of foreign body ingestion prior to presentation.

On examination, he was well and comfortable throughout consultation. On examination of the oral cavity, only the right palatine tonsil appeared to be enlarged (grade III) and mildly inflamed. The left palatine tonsil was normal. Otherwise, the surrounding peritonsillar region and soft palate on the right appeared to be normal with no evidence of quinsy or peritonsillitis. He was initially treated with oral antibiotic Ampicillin/Sulbactam for 1 week. However, he returned to our clinic with the same complaint 2 weeks later with no improvement of the symptoms. Hence we initially decided to proceed with Trucut biopsy under local anesthesia to rule out malignancy in view of the age of the patient and persistence of unilateral tonsillar hypertrophy. Upon insertion of the Trucut needle, to our surprise, frank pus was drained directly from the right tonsil (Fig. 1). Subsequently, incision and drainage of the intratonsillar abscess were performed. Vertical incision was made on the right tonsil and the pus was sent for culture and sensitivity. Although the patient was screened negative for tuberculosis and the culture showed no known pathogen, he was isolated.

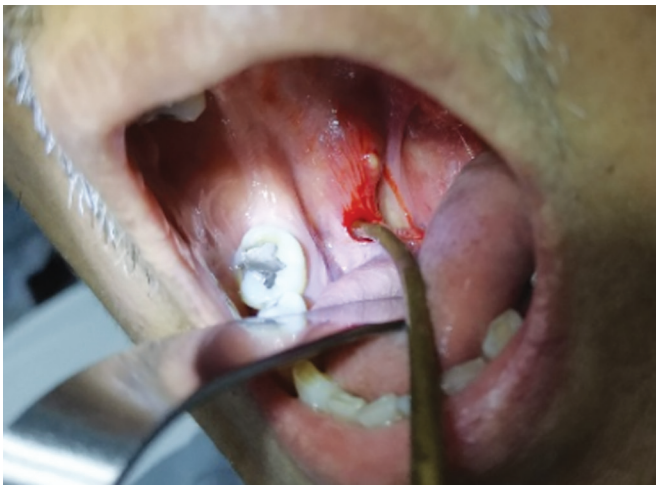

**Fig. 1:** Pus discharging from the right intratonsillar abscess

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The patient was subsequently admitted for intravenous (IV) antibiotic Ampicillin/Sulbactam for a 1 week duration. Throughout the stay, the patient required repeated reopening of the incision and drainage wound to drain out the pus. Subsequently, there was no recollection and complete resolution of symptoms after 5 days of treatment. Patient remained afebrile and was subsequently discharged well.

## Discussion

The palatine tonsils are paired structures consisting of lymphoid tissue which are located in the tonsillar fossa between palatoglossus (anterior pillar) and palatopharyngeus muscle (posterior pillar). Intratonsillar abscess is a rare entity of tonsillar disease. It is defined as focal areas of neutrophils and necrotic debris within the parenchyma of the tonsil.[2] To date, only 48 cases have been reported so far from our literature review. Most of the cases happened at young age of less than 20 years old (78%). Among these, 59% were male and 41% were females.

There is no absolute theory available on the pathogenesis of intratonsillar abscess formation. Tonsillar abscess formation is commonly known as a sequela of acute follicular tonsillitis. Two mechanisms have been postulated previously. First mechanism was by direct extension of an acute inflammation into the tonsillar crypt which lead to occlusion of the crypt and later formation of abscess within the crypt.[5] Another mechanism is seedling of bacteria via blood stream or lymphatics into the palatine tonsil.[2] Intratonsillar abscess is much rarer than peritonsillar abscess due to absence of valves within the tonsillar capsule which allowed rapid lymphatic drainage into the peritonsillar space and does not allow adequate time for aggregation of bacteria within tonsillar parenchyma.[5]

Treatment for intratonsillar abscess is controversial. Previous authors suggested that needle aspiration with antibiotic cover may be adequate, more effective, low cost, less pain, and less invasive treatment modality in which most of the literatures had agreed on this.[4,6,7] However, some literatures also suggested that needle aspiration might leave residual impacted nidus in the deeper inaccessible parts of the crypts of the tonsils.[8] In another reported cases, one of the literatures suggests that stable patient should undergo IV antibiotic alone and only those with airway compromise or combined peritonsillar and intratonsillar abscess which required surgical intervention.[9] In one of the literatures, incision and drainage were done only for patients whose symptoms failed to resolved completely following needle aspiration. Tonsillectomy has also been done in some patients who do not respond to IV antibiotic.[2] In our case, we performed an incision and drainage of abscess under local anesthesia in our clinic with 1 week of antibiotic in the ward. Patient had complete resolution of symptoms and full recovery subsequently.

## Conclusion

In summary, intratonsillar abscess is rare. There are very few literatures discussing about this condition. It is often overlooked as one of the differential diagnoses of unilateral tonsillar hypertrophy. The treatment modalities vary among centers. Therefore, it is important to include intratonsillar abscess as one of the differential diagnoses of the unilateral tonsillar hypertrophy apart from malignancy especially in the elderly age-group.

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