



## UNMASKING THE HIDDEN GIANT: A RARE CASE OF A GIANT TONSILLOLITH MIMICKING CHRONIC TONSILLITIS

Azura Sharena Yahaya<sup>a\*</sup>, Loh Sheau Torng<sup>b</sup>, Fazil Ibrahim<sup>c</sup>

<sup>a</sup> Department of Clinical, Faculty of Medicine and Defence Health, National Defence University of Malaysia, Sg. Besi Camp, 57000 Kuala Lumpur, Malaysia

<sup>b</sup> Department of Otorhinolaryngology, Tuanku Mizan Armed Forces Hospital, Wangsa Maju, 53300, Kuala Lumpur, Malaysia

<sup>c</sup> Department of Diagnostic Imaging, Tuanku Mizan Armed Forces Hospital, Wangsa Maju, 53300, Kuala Lumpur, Malaysia

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### ABSTRACT

Tonsilloliths, or tonsil stones, are calcified deposits that develop within the crypts of the palatine tonsils. While typically small and asymptomatic, the occurrence of giant tonsilloliths is exceptionally rare, with limited cases documented in the literature. We present the case of a 30-year-old woman with a nine-year history of recurrent, unresolved tonsillitis, who was found to have a giant tonsillolith in the right palatine tonsil. Diagnosis was confirmed via computed tomography (CT), revealing a large, lobulated, hyperdense lesion. The tonsillolith was surgically excised, leading to significant symptomatic relief. This case highlights the importance of maintaining a high index of suspicion for giant tonsilloliths in patients with chronic tonsillar symptoms and underscores the role of imaging and timely surgical intervention in their management.

## 1.0 INTRODUCTION

Tonsilloliths, or tonsil stones, are calcified deposits that develop within the crypts of the palatine tonsils because of recurrent inflammatory processes [1-2]. These deposits primarily consist of calcium hydroxyapatite, calcium carbonate, and organic material, including bacterial biofilms and cellular debris [4]. While most tonsilloliths range in size from 2 to 5 mm and remain asymptomatic [3-5], giant tonsilloliths those significantly exceeding these dimensions, are exceptionally rare [6-8].

Clinically, tonsilloliths present as firm, whitish or yellowish masses within the tonsillar crypts. Although smaller tonsilloliths are often incidental findings, larger ones may cause symptoms such as dysphagia, a persistent foreign body sensation, and recurrent tonsillitis [9-11]. Due to their size and radiopacity, giant tonsilloliths may be misdiagnosed as malignancies or other calcified lesions. Imaging, particularly computed tomography (CT), plays a crucial role in their accurate diagnosis and differentiation from other conditions [12-14]. Here, we report an unusual case of a giant tonsillolith in a young woman with a long-standing history of recurrent tonsillitis, highlighting the diagnostic challenges and management approach.

## 2.0 CASE PRESENTATION

A 30-year-old woman with a medical history of diabetes mellitus, hypertension, bronchial asthma, and gastritis presented with a nine-year history of recurrent tonsillitis. Her symptoms included mild dysphagia, pain on swallowing, and a persistent foreign body sensation in the throat. Despite multiple treatments for tonsillitis and tonsil ulcers, her symptoms persisted without significant improvement. On physical examination, a hard, submucosal mass was identified in the right tonsillar region, with overlying mucosal

\*Corresponding Author | Yahaya, A. S. | [sharena@upnm.edu.my](mailto:sharena@upnm.edu.my)

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erythema. No cervical lymphadenopathy or other palpable neck masses were detected. Laboratory investigations, including complete blood count and inflammatory markers, were within normal limits.

A contrast-enhanced CT scan of the head and neck revealed a well-defined, lobulated, hyperdense lesion within the right palatine tonsil, measuring 1.4 cm × 1.8 cm × 3.1 cm (anteroposterior × width × height) as in Figure 1 and Figure 2. No associated soft tissue masses or significant lymphadenopathy were observed. Based on these findings, a diagnosis of a giant tonsillolith was established.

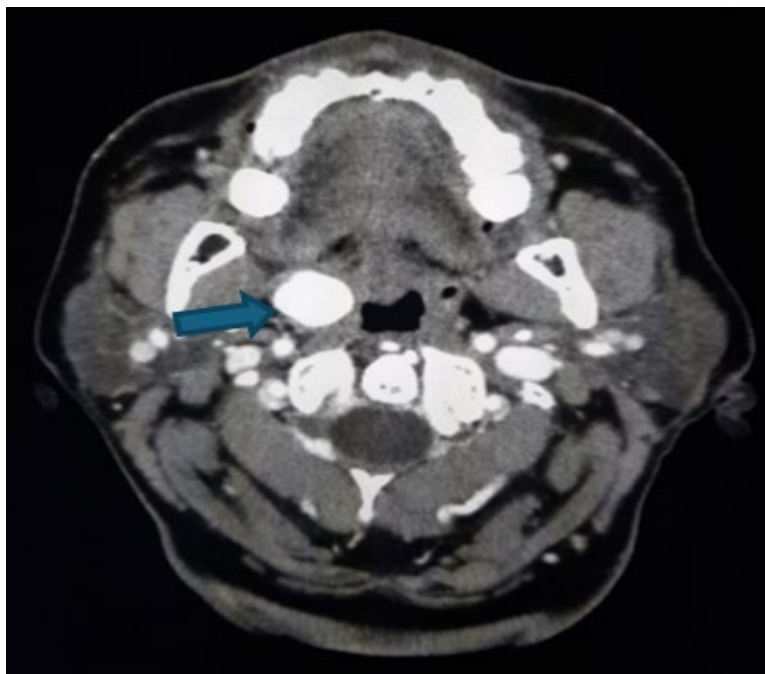


Figure 1. Axial image of the neck showing a large lobulated calcified lesion in the right palatine tonsil (blue arrow)

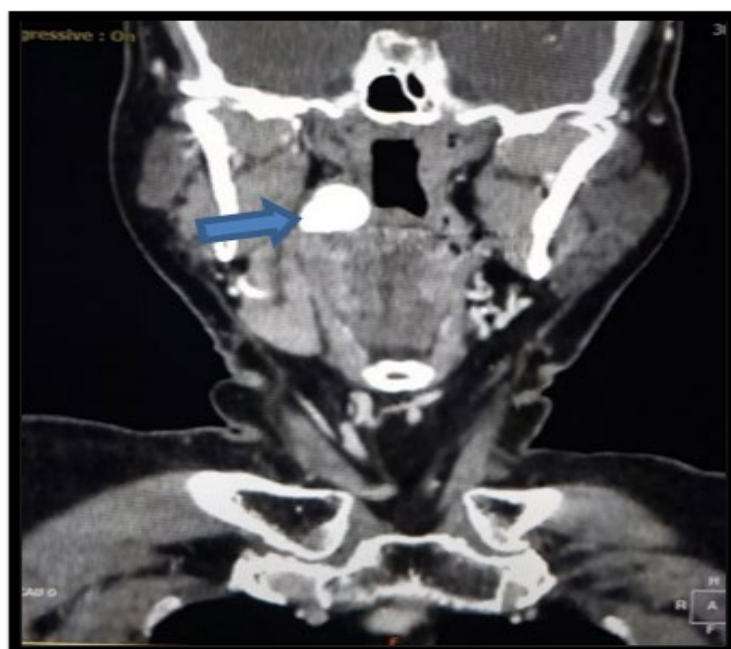


Figure 2. Coronal image of the neck showing a large lobulated calcified lesion in the right palatine tonsil (blue arrow)

### 3.0 RESULTS AND DISCUSSIONS

The patient underwent surgical excision of the tonsillolith under local anesthesia. Direct laryngoscopy confirmed the absence of residual abnormalities as in Figure 3. To prevent recurrence, an elective tonsillectomy was planned for one month later. At her follow-up visit, the patient reported complete symptom resolution, with no evidence of recurrence.

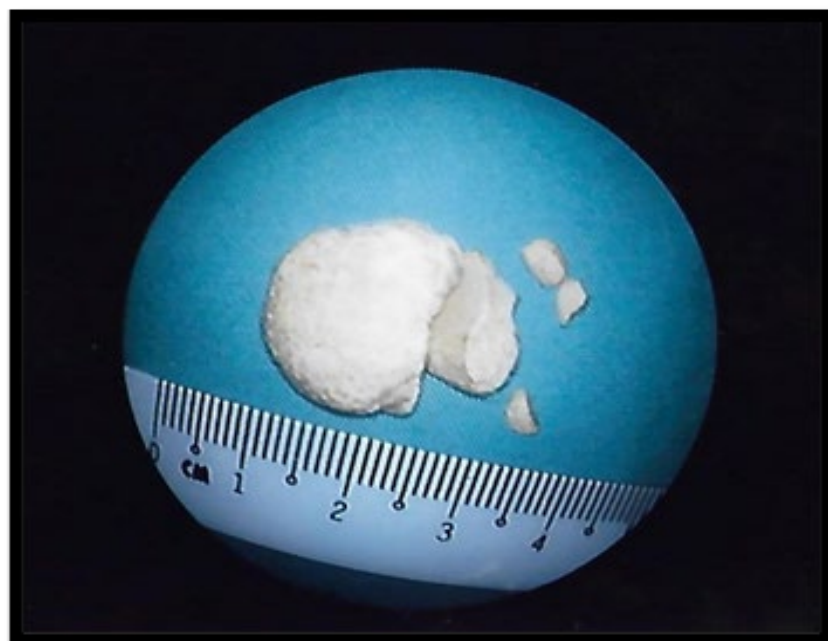


Figure 3: A fragmented giant tonsillolith extracted from the right tonsil measuring about 3.0 cm

Diagnosing giant tonsilloliths can be challenging, as their appearance may mimic other calcified lesions such as neoplasms, infectious granulomas [15-17], or lymph node calcifications. In this context, computed tomography (CT) plays a critical role in accurate diagnosis. Compared to plain radiographs, CT offers superior spatial resolution and anatomical detail [18-20], allowing for precise localization, assessment of lesion size and extent, and differentiation from other pathologies. In the present case, CT imaging was pivotal in confirming the diagnosis and ruling out alternative causes of the patient's chronic tonsillar symptoms.

Surgical removal remains the definitive treatment for symptomatic or large tonsilloliths. In this case, surgical extraction of the calcified mass led to immediate symptom resolution. An elective tonsillectomy was also planned to prevent recurrence, as chronic tonsillitis can predispose to repeated formation. This case underscores the importance of maintaining a high index of suspicion for tonsilloliths in patients with persistent tonsillar complaints. CT imaging should be considered early in the diagnostic workup, particularly for atypical or refractory cases. Prompt recognition and surgical intervention can ensure symptom relief and avoid misdiagnosis or unnecessary procedures.

### 4.0 CONCLUSION

Although rare, giant tonsilloliths should be considered in the differential diagnosis of patients with chronic, recurrent tonsillitis. CT imaging plays a pivotal role in accurate diagnosis and surgical planning. Surgical excision remains the treatment of choice, providing significant symptomatic relief. Increased awareness among clinicians and radiologists is crucial for early identification and appropriate management of this rare entity.

### 5.0 CONFLICT OF INTEREST

The authors declare no conflicts of interest.

## 6.0 AUTHORS CONTRIBUTION

Yahaya, A. S. (Writing - original draft; Writing - review & editing)

Loh, S. T. (Conceptualisation; Methodology; Project administration; Supervision)

Ibrahim, F. (Methodology; Validation)

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