

Case Report

Giant tonsillolith: a case report and review of literature

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ABSTRACT

We had a sixty years old male patient, who had one year history of foreign body sensation in throat and the history of odynophagia for the last ten days. The NCCT neck showed 3.08×2.28 cm homogenous calcified mass in left tonsillar fossa. The stone was removed and tonsillectomy was performed. Giant tonsillolith is a rare clinical entity. As per available literature, 54 cases of giant tonsilloliths have been reported and to the best of our knowledge, this is one of the largest tonsillolith in the world till date.

Keywords: Tonsillolith, Oral cavity

INTRODUCTION

Giant tonsillolith is a rare clinical entity although small concretions in the palatine tonsils are a common clinical findings in adults.¹ The right sided lesions more common. These patients usually present with bad breath, pain during swallowing or foreign body sensation in the throat. In English literature, there are fifty four reports on giant tonsillolith.^{2,3}

We report a case of giant tonsillolith with rare clinical finding and review of literature.

CASE REPORT

Sixty years male presented with history of foreign body sensation in left side of throat for the last one year and history of odynophagia from 10 days. The patient also had history of bad breath. There was no history of recurrent fever, bleeding from oral cavity, change in voice, vomiting, dyspnoea and neck swelling.

Examination of the oral cavity showed smooth mucosa covered bulge confined to left tonsillar fossa in lower half. Where as in the upper half of tonsillar fossa, a

yellowish mass protruding in oropharynx. The mass was pushing the uvula toward right side. The 9th, 10th and 11th cranial nerve function were normal on both side. On palpation, the mass was hard in consistency and it was tender. The deeper extent could not be judged because of tenderness. It was not bleed on touch. The rest of oral cavity was normal. The indirect laryngoscopy examination showed both side vocal cords, normal mobility. There was no neck swelling. The NCCT of neck showed 3.08×2.28 cm homogeneously calcified mass in left tonsillar fossa, which showed similar consistency with mandible (Figure 1).

The calcified mass was pushing the outer wall of tonsillar fossa laterally with partial obliteration of parapharyngeal space of left side. The diagnosis of giant tonsillolith was made. After informed consent, the patient was posted for removal of tonsillolith with left tonsillectomy under general anesthesia. The giant tonsillolith was extracted in atraumatic condition (Figure 2).

The post-operative period was uneventful and the patient is doing well.



Figure 1: NCCT Neck showed homogenous radioopaque mass in left tonsillar fossa.



Figure 2: Tonsillolith in toto.

DISCUSSION

Tonsilloliths are clusters of calcified material that form in the crypts of the tonsils.⁴ Tonsilloliths or tonsillar concretions occur in up to 10% of the population, frequently due to episodes of tonsillitis. While they occur most commonly in the palatine tonsils, they may also occur in the lingual tonsil. They are composed mostly of calcium salts, but may contain other minerals such as phosphorus and magnesium, as well as ammonia and carbonate.⁴ In literature, size of the tonsillolith ranges from few millimeters to several centimeters with the largest described being 41×21 mm,⁵ however in our case it was 3.08×2.28 cm in size. The recorded weight of tonsillolith varies between 300 mg to 42 g, where as in our case it was 215 g. Mesolella et al.² in the review of fifty cases, 69.7% tonsillolith were located in the tonsillar tissue, 21.2 % in the tonsillar fossa while in 9% the tonsillolith were palatine in location. In our case the tonsillolith was confined in tonsillar tissue. The small tonsilloliths may produce no symptoms, may be associated with bad breath, or may produce pain during swallowing.⁶ Larger tonsilloliths may cause multiple symptoms, including recurrent halitosis, sore throat,

difficulty in swallowing, and tonsillar swelling as seen in our case. A review of literature shows that tonsillolith more than 2 cm in largest dimension were usually associated with significant symptoms, however in our patient size was more than 3 cm with mild discomfort. Tonsilloliths occur more frequently in adults than in children, similar to our patient. In asymptomatic condition, diagnosis is based on examination and palpating the hard intratonsillar or submucosal mass. The exact pathogenesis of these stones is unknown although there are many hypotheses on the formation of these calculi. It has been stated that they originate as a result of repeated tonsillitis which lead to fibrosis of ducts of crypts and retention of epithelial debris thereof. This epithelial debris forms the ideal media for the growth of bacterial, actinomyces and fungi such as *Leptothrix buccalis*.⁶ Finally dystrophic calcification occurs as a result of deposition of above stated inorganic salts from the saliva secreted in the mouth by major and minor salivary glands. The differential diagnosis of tonsilloliths includes foreign body, calcified granuloma, malignancy, an enlarged temporal styloid process.^{2,7} Imaging diagnostic techniques can identify a radiopaque mass that may be mistaken for foreign bodies, displaced teeth or calcified blood vessels. Computed Tomography (CT) may reveal nonspecific calcified images in the tonsillar zone similar to our case.⁸

Often, no treatment is needed, as few stones produce symptoms. Treatment option includes irrigation, curettage and laser or coablation cryptolysis.⁹ It has been advocated to remove the stone surgically or perform tonsillectomy if stone is large or impacted within tonsil similar to our case and when bad breath persist with other measures.^{3,10}

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