

A Case Report of Giant Tonsillolith

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ABSTRACT

Tonsilloliths, also known as tonsil stones or tonsillar calculi, are clusters of calcified material that form in the crypts of palatine tonsils. They are usually of small size. Large or giant tonsilloliths are rare. We report a case of giant tonsillolith in the right palatine tonsil and literature is reviewed.

Keywords: Tonsillolith, Tonsils, Calculus.

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INTRODUCTION

Tonsilloliths are calcified concretions that develop in tonsillar crypts, within the substance of the tonsil or around it. They occur in up to 10% of the population, frequently due to episodes of tonsillitis. These calculi are composed of calcium salts either alone or in combination with other mineral salts. Small concretions are relatively common but large or giant tonsilloliths are rare¹ and very few cases are reported in the literature.² We report a case of giant tonsillolith in the right palatine tonsil.

CASE REPORT

A 56-year-old female patient presented with foreign body sensation in the throat since 3 months. It was associated with halitosis and occasional right ear ache. She had recurrent episodes of throat pain in childhood.

Oral examination revealed a large, brownish-black mass protruding from the right tonsillar tissue mimicking a foreign body (Fig. 1). On palpation, the mass was stony hard in consistency with irregular rough surface.

The tonsillolith measuring about 2 × 1.5 cm was removed under topical anesthesia (Fig. 2) and oral mouth gargle was prescribed. The patient is now asymptomatic without any recurrence.

DISCUSSION

The earliest known description of oropharynx concretions is recorded in 1560.¹ Tonsilloliths are calcified structures of bacteria and organic debris that commonly develop in the tonsillar crypts, within the substance of the tonsil or around it. They occur between 20 and 77 years of age and are rare in pediatric age group.³ In a review by Mesolella



Fig. 1: Tonsillolith embedded in the right tonsil



Fig. 2: Brownish-black tonsillolith measuring 2 × 1.5 cm

et al,² they were found to be located in the tonsillar tissue in 69.7%, in the tonsillar fossa in 21.2 and 9% were palatine in location. Only one case of calculi in the lingual tonsil has been reported in the literature.⁴

The exact pathogenesis of these calculi is unknown although there are many hypothesis on the formation of these. It has been stated that they originate as a result of repeated tonsillitis which lead to fibrosis of the ducts of crypts and retention of epithelial debris thereof. This epithelial debris forms the ideal media of growth of bacterial, actinomyces and fungi, such as *Leptothrix buccalis*. Finally, dystrophic calcification occurs as a result of deposition of

inorganic salts from the saliva secreted by major and minor salivary glands.⁵ Other authors have proposed alternative mechanisms when the calculi are located in the peritonsillar areas, such as existence of ectopic tonsillar tissue, the formation of calculi secondary to salivary stasis within the minor salivary gland ducts in these locations or the calcification of abscessified accumulation.⁶

Clinical signs and symptoms are usually absent in small tonsilloliths. Larger ones may present with foreign body sensation in the throat, recurrent halitosis, odynophagia and referred otalgia. On throat examination, tonsillolith may be seen embedded in the tonsillar crypt. They may be single or multiple and of variable shapes like round, oval, cylindrical, pyramidal or plurilocular. The color also varies from grayish-yellow to dark gray, black or red brown.² It may present as tonsil or tonsillar fossa swelling when it is embedded inside the tonsillar tissue or fossa and can be palpated as a hard mass.⁷ The diagnosis can be easily made by clinical examination. Doubtful cases can be confirmed with imaging diagnostic techniques which will show the radiopaque shadow. Differential diagnosis of tonsilloliths includes foreign body, calcified granuloma, malignancy, an enlarged styloid process or rarely isolated bone which is usually derived from embryonic rests originating from the branchial arches.⁸

Treatment usually involves removal of tonsillolith under topical or local anesthesia. Vigorous mouth gargling daily helps in keeping the tonsil crypts clear of debris. In case of a large tonsillolith impacted within the tonsil or in chronic tonsillitis, tonsillectomy is indicated.⁹ In recurrent tonsilloliths, laser cryptolysis can be done to decrease the surface area of the tonsils via laser surfacing. A scanned

carbon dioxide laser selectively vaporizes and smoothens the surface of the tonsils and thus flattens the edges of crypts preventing trapped material from forming calculus.

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