

Case Report

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A giant tonsillolith camouflaging as a peritonsillar abscess

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ABSTRACT

Giant tonsillolith is a rare clinical entity. We present the case of a 7 years old male who presented with sore throat and difficulty in swallowing. Right tonsil was bulging into the oropharynx with marked peritonsillar swelling and inflammation and a provisional diagnosis of peritonsillar abscess was made. Contrast enhanced computed tomography scan revealed a large-sized tonsillolith on the right side. The patient underwent elective stone removal and tonsillectomy.

Keywords: Tonsillolith, Peritonsillar abscess, Chronic tonsillitis

INTRODUCTION

Tonsilloliths are white or yellow concretions in tonsillar crypts. The mechanism of formation is a subject for debate though it has been postulated that it occurs as a result of microorganism and cellular debris retention in the crypts of palatine tonsils.¹ Small tonsil stones are common findings, observed in excised tonsils on gross inspection and specimen sectioning, and are associated with recurrent sore throat.² Halitosis is the main clinical complaint in small tonsilloliths.² In contrast, giant tonsillolithiasis is a rarity especially in children, with a few cases reported in the literature.^{3,4}

CASE REPORT

A 7 years old male presented to the outpatient department with sore throat, odynophagia and foreign body sensation in throat of 7 days duration. He also had history of recurrent tonsillitis for the past 2 years.

The past medical history was unremarkable with the child immunized for age as per national immunization schedule of the government of India.

Clinical examination revealed a bulge of the upper pole of right tonsil extending to the soft palate. There was peritonsillar swelling and inflammation with a whitish point close to the upper pole of the tonsil (Figure 1). There were no palpable neck nodes. Haematological investigations were within normal limits.



Figure 1: Intra operative photograph showing bulge on right anterior pillar.

A provisional diagnosis of peritonsillar abscess was made and abscess drainage was planned. A contrast enhanced

computed tomography (CT) scan of the neck was performed to exclude any parapharyngeal space extension. CT scan reported the presence of a large lobulated, well-defined, calcified right tonsillar mass measuring $1 \times 2 \times 2.3$ cm and a smaller calcified mass on the left side (Figure 2). There was no collection of fluid or significant lymphadenopathy in the neck.



Figure 2: Computed tomography image of the giant tonsillolith on right side.

Tonsillectomy was done and tonsilloliths were removed. During surgery it was observed that the large tonsillolith was occupying a deep pocket in the peritonsillar region close to the upper pole of the right tonsil. Histopathological analysis confirmed the presence of chronically inflamed tonsils.

DISCUSSION

The earliest known recorded description of oropharyngeal concretions is in 1560.⁵ The exact mechanism of development of tonsillar stones is not well understood. One hypothesis attribute stone formation to recurrent tonsillitis and subsequent crypt fibrosis that leads to epithelial cell retention. This creates an environment for microorganism overgrowth and calcification due to deposition of inorganic salts from salivary gland secretions.^{2,4}

Tonsilloliths exhibit a biofilm structure in which aerobic and anaerobic bacteria colonies an epithelial or mucosal surface in the presence of an extracellular matrix that envelopes the bacteria. Tonsilloliths act as a localized concentration of bacteria that ultimately calcifies by progressing from a soft gel to hard concretions.¹ It usually occurs in adults and is rare in young children.⁴

A giant tonsillolith may be an incidental finding in asymptomatic patients. Reported clinical presentations of

giant tonsilloliths include recurrent sore throat, halitosis, foreign body sensation, odynophagia, hoarseness, and at times upper airway obstruction.⁶ It rarely presents as a peritonsillar bulge with inflammatory signs mimicking a peritonsillar abscess as in the present case. No part of the calculus was visible clinically since it was embedded in the upper pole of tonsil and peritonsillar tissue. It was CT scan that clinched the diagnosis in this patient. Imaging studies may also be helpful to identify the size, extent, and location of the stone.⁷ Treatment of choice in giant tonsillolith is surgical removal along with tonsillectomy.

CONCLUSION

Tonsilloliths are incidental findings and are usually asymptomatic in nature, although it can be associated with recurrent tonsillitis. Giant tonsilloliths are rare especially in children. Preferred treatment is by surgery.

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