



RESEARCH ARTICLE

BIO CHEMISTRY

TONSILOLITH: A CASE REPORT.



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ABSTRACT

Tonsilolith is unusual presentation of stone in tonsillar crypt. Etiology of tonsilolith is multifactorial and not usually diagnosed. Here a patient presented with bad smell from her breath and difficulty in swallowing. Radiological and biochemical investigation helped us to diagnose tonsilolith.



KEY WORDS

Tonsilolith, etiology, complications, investigations.

INTRODUCTION

Tonsilolith is called as tonsil stone or throat stone. It is a cluster of calcareous matter in the tonsillar crypt of palatine tonsil. The size may vary and are usually cream in colour. Tonsilolith protrudes out of the tonsillar crypt, feels like foreign body in mouth and not usually harmful, one of the common cause of bad breath and more common in adults than in children. It is detected accidentally on oral examination or X-ray or CT scan. Larger tonsilolith may present with symptoms like choking, tonsillitis, sore throat, dysphagia, ear ache, headache etc., but small sized tonsiloliths are usually symptom less. The causes of tonsilolith are debris of dead white cells with oral bacterial action, hyperactive salivary glands, betel nut chewing, tobacco chewing (with CaCO_3), mucous secretions, intolerance to food or dairy products, salivary stasis and hypercalcemia precipitates the formation of tonsiloliths ^[1, 2, 3].

Case:

27 year old female presented to ENT Out Patient Department with difficulty in swallowing, feeling foreign body sensation inside the mouth and bad breath since 3 months. General physical examination was normal but pallor was noted in nails (hand) and conjunctiva. The patient was from village and was having the habit of chewing tobacco and beetle nut along with calcium carbonate (CaCO_3) many times(15 to 20) in a day. No habits of smoking or alcohol consumption. All routine biochemical investigations were normal except calcium 12.4mg/dl (normal: 9.1 – 12.0 mg/dl) and phosphate 5.5 mg/dl (normal: 3.0 – 4.5mg/dl). Ear and nose examination was normal. Oral examination revealed a swelling in the right

palatine tonsil measuring about $0.3 \times 0.4\text{cm}$, it was hard but not fixed and there was no discharge from the swelling, draining lymph nodes were not enlarged. With the help of X-ray Para nasal sinus (PNS) view, a tonsilolith was radiologically identified. Treatment included the removal of tonsilolith via oral curette under local anaesthesia. The tonsilolith was sent for biochemical analysis which revealed chemical components such as calcium, oxalate and phosphate.

DISCUSSION

Tonsilolith or tonsil stone are unusual presentation of stones in the tonsillar crypts. They may occur with various etiology connected with salivary gland, oral cavity and metabolic disturbances. The most common complication with tonsilolith includes halitosis (bad breath), dysphagia, choking, tonsillar and ear diseases. The differential diagnosis of tonsilolith include chronic tonsillitis, peritonsillar abscess, tonsillar hypertrophy, foreign bodies like phlebolites, ectopic cartilage or bone, lymph nodes, submucosal lipoma, granulomatous lesions etc., ^[1,2,4,5] In present case, the lady was chewing tobacco and betel nut along with calcium carbonate (CaCO_3) which might had lead to hypercalcemia, in combination with Salivary stasis and bacterial action on it might had lead to the formation of tonsilolith. Methods to prevent the development of tonsilolith include drinking adequate amount of water throughout the day which hydrates the throat. Carbonated drink or soda will help in dislodging the stone, by keeping oral hygiene healthy by cleaning mouth after eating,



avoiding chewing tobacco or betel nut with calcium carbonate, and avoiding smoking with or without filter and food or dairy products causing

allergy. Thus the formation of tonsilolith(s) can be prevented by the practice of good oral hygiene and hydration.

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