

MANAGEMENT OF PALATINETONSILLOLITHS

(PENATALAKSANAAN BATU TONSILA PALATINA)

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Abstract

Palatine Tonsilloliths are stones that lodged in tonsillar palatine crypt, tonsillolith are stones that caused by an accumulation of sulfur-producing bacteria, fungus, desquamated cells, food debris, and mucus that collect in the tonsillar crypts. Tonsillolith also known as tonsil stones, tonsillar concretion, or lith. Tonsilloliths have been recorded weighing from 0,3g to 4g. They may be difficult to remove, but are usually not harmful. Tonsillolith can be unilateral or bilateral. Occurs in young adult and are rare in children. Etiology is unknown, it has been shown that the calcification develop with mass of desquamated epithelium, serum, food debris and bacterial colony. This case reports a patient with palatine tonsilloliths. A 55 years old female came to a private clinic, she complained difficult to swallow, sore throat, itching in right tonsillar, a foreign body-like sensation. On clinical examination, a superficial tonsillolith may be seen as white hard mass within the right tonsillar, tonsillar slightly inflammation. The tonsillolith size is 2x3x1mm. Treatment is usually removal of the tonsilloliths by excavation tonsil stones and although mouthwash/ oral rinse without alcohol, antibiotic, gargling helps wound healing. After tonsillolith excavated, a week later the wound healing is well. Her right palatine tonsil looks healthy, wound healing is normal no sore throat, prognosis is good. Healing will be perfect when eating soft food. Successful treatment depends on good cooperation between the patient and the doctor.

Key words: palatine tonsilloliths, sore throat, excavated

Tonsillolith Palatine adalah batu yang bersarang dalam kript tonsilapalatina, *tonsillolith* adalah batuyang disebabkan oleh akumulasi bakteri yang menghasilkan sulfur, jamur, sel-sel yang mengalami deskuamasi, sisa makanan, dan lendir yang terkumpul di dalam kript tonsil. *Tonsillolith* juga dikenal sebagai batu amandel, batu tonsila, atau lith (batu). *Tonsilloliths* telah ditemukan dengan berat 0,3g hingga 4g. Batu tersebut mungkin sulit untuk dihilangkan, tetapi biasanya tidak berbahaya. *Tonsillolith* bisa unilateral atau bilateral. Terjadi pada orang dewasa muda dan jarang terjadi pada anak-anak. Etiologi tidak diketahui dengan pasti, telah terbukti bahwa batu tonsila berkembang dari massa epitel yang bergabung dengan serum, sisa makanan dan koloni bakteri. Laporan kasus ini mengenai pasien dengan *diagnosapalatine tonsilloliths*. Seorang wanita berusia 55 tahun datang ke klinik swasta, dia mengeluh sulit menelan, sakit tenggorokan, gatal di tonsila palatina kanan, sensasi seperti ada benda asing. Pada pemeriksaan klinis, *tonsillolith* superfisial dapat dilihat sebagai massa keras berwarna putih pada tonsilapalatina kanan, dengan sedikit peradangan tonsila. Ukuran *tonsillolith* adalah 2x3x1 mm. Penanganan biasanya pengangkatan batu tonsila dan obat kumur tanpa alkohol, antibiotik, dengan berkumur membantu penyembuhan luka. Setelah tonsil diangkat, seminggu kemudian penyembuhan luka berlangsung dengan baik. Tonsil palatinakanan terlihat sehat, penyembuhan luka normal tidak ada sakit tenggorokan, prognosa bagus. Penyembuhan akan sempurna bila makan makanan lunak. Keberhasilan pengobatan tergantung pada kerja sama yang baik antara pasien dan dokter.

Kata kunci: *tonsillolith palatine*, sakit tenggorokan, diangkat

INTRODUCTION

Tonsilloliths has another terms are tonsil stones, tonsil concretions, calcification of the tonsillaror simply called liths¹. Tonsilloliths are stones that caused by an accumulation of sulfur-producing bac-

teria, fungus, desquamated epithelial cells, food debris, and mucus that collect in the tonsillar crypts¹⁻⁴. Tonsilloiths can be located in the palatine tonsil (palatine tonsilloliths)^{4,5}, nasopharyngeal tonsil (adenoid)³, sometimes discovered in lingual tonsil^{4,5}, more frequently in palatine tonsilloliths. It can be

discovered such as unilateral or bilateral location^{2,3,5}. Tonsilloliths have been recorded weighing from 0,3g to 4g, the average size of tonsilloliths was 4mm (range: 3-11 mm)¹. Tonsillolith are white mass calcified structure^{1,4,6,7}. They may be difficult to remove, but are usually not harmful. Tonsilloliths can occur in both genders and all age of groups otherwise more frequently in adults than in children, male and female ratio of 1:1. No surgical treatment needed, sometime are able to remove by gargles vigorously¹. Etiology is unknown^{1,6,8}, it has been shown that the calcification develop with mass of desquamated epithelium cells, serum, food debris and bacterial colony¹⁻⁵. The purpose of this study is to manage the palatine tonsilloliths, the problems: difficult to swallow, sore throat and itching in right palatine tonsil.

CASE REPORT

A 55 years old female came to a private clinic, she complained difficult to swallow, sore throat, itching in right posterior tonsil, a foreign body-like sensation. Past history revealed an approximately a year of slight swallowing pain. On general physical examination observed that she is a normal condition. Extra oral examination: we check the region of head and neck: we may check upper respiratory system, and normal. The right submandibular lymph nodes is detected, Intra oral examination oral hygiene rare, there is white or yellowish mass in the right palatine tonsillar, difficult to remove, tonsil swelling. A foreign body sensation may also be an asymptomatic condition, with solid detection upon excavator dental tools, the foreign body is hard in right intra palatine tonsillar.

CASE MANAGEMENT

Management of tonsilloliths is dependent on size, symptoms, and informed patient discussion. In this case, she complained difficult to swallow, sore throat, itching in right posterior tonsil, a foreign body-like sensation. The patient's past history revealed an approximately 1-year of slight swallowing pain. The right submandibular lymph nodes are detected (palpable neck lymphadenopathy): no pain. Oral manifestations of the patient are oral hygiene rare, tonsillar slightly inflammation, there is a white or yellowish mass in the right intra palatine tonsil. The palpating is solid (by excavator), no surgical intervention was needed. The diagnosis is palatine tonsilloliths. The treatment is excavated of white mass from right intra palatine tonsillar. The physical of tonsillolith revealed following: shape irregular,

rough surfaces, semi hard consistency and the size is 2x3x1mm.



Figure 1. White or yellowish mass in the right palatine tonsillar¹⁰



Figure 2. White or yellowish mass as palatine tonsilloliths¹⁰

The treatment are antibiotic, analgesic, mouth-wash, Chlorhexidine can be used as a valuable antiseptic agent. Good oral hygiene instruction is another important issue for easier healing. Two weeks later the wound healing is well. Her right tonsillar palatine looks healthy, no red anymore, prognosis is good. Wound healing is normal. Healing will be perfect when finding the cause accompanying clinical symptoms.

DISCUSSION

Palatine tonsilloliths or tonsil stones are calcified bodies that develop in enlarged tonsillar crypts. Palatine tonsilloliths is unpleasant condition from the mouth that is detected by the patient who complained difficult to swallow, sore throat, itching in right posterior tonsil, a foreign body-like sensation. This undesirable condition is a common complaint for both genders^{5,7}. The age range was for all age groups, male and female ratio of 1:1. Tonsilloliths

can occur in up to 10% of the population. The population of patients with tonsilloliths is range 10 to 77 years, with mean occurrence 46 years¹.

Palatine Tonsilloliths are stones that lodged in tonsillar palatine crypt, tonsilloliths are stones that caused by an accumulation of sulfur-producing bacteria, fungus, desquamated cells, food debris, and mucus that collect in the tonsillar crypts. Etiology of tonsillolith is unknown and located in the peritonsillar region. Tonsillolith show differences size is 3-11 mm, the shape are round, oval, square, and irregular. The consistency is gel to solid and color is white or yellowish mass. They are usually asymptomatic but can be associated with sore throat, difficulty in swallowing, and neck pain. A patient with the right side palatine tonsillar pain, distributed within the tonsillar crypt, fossa and pharynx. Tonsilloliths are associated with recurrent inflammation⁸.

Treatment in this case report by detected etiology, treatment is usually removal of the tonsilloliths by

excavated (small) or curettage (big). Dentist should be aware of tonsilloliths as possible cause of orofacial pain or glossopharyngeal pain, but the cause and pathogenesis still remain unknown¹¹. The patient's past history revealed an approximately 1-year of slight swallowing pain. According to Dykes⁹, tonsillolith are associated with recurrent inflammation as tonsillitis, this corresponds to the patient condition, that the patient had recurrent inflammation as well as a year ago. Tonsilloliths are thought to result from unresolved tonsillitis; infectious agents⁵.

This describes offers an alternate etiology to tonsillolith formation by salivary glands obstruction, chronic inflammation or whenever low body defense. Successful treatment depends on good cooperation between the patient and the doctor.

REFERENCES

1. Bamgbose BO, Ruprecht A, Hellstein J, Timmons S, Qian F. The prevalence of tonsillolith and other soft tissue calcifications in patient attending oral and maxillofacial radiology clinic of the University of Iowa. *ISRN Dent* 2014; 2014: 1-9.
2. Fauroux MA, Mas C, Tramini P, Torres JH. Prevalence of palatine tonsilloliths: a retrospective study on 150 consecutive CT examinations. *Dentomaxillofac Radiol* 2013; 42(7): 1-3.
3. Ram S, Siar CH, Ismail SM, Prepageran N. Pseudo bilateral tonsilloliths: case report and review of the literature. *J Oral Surg Oral Med Oral Pathol Oral Radiol Endod*. 2004; 98 (1): 110-4.
4. Bai KY, Kumar BV. Tonsillolith: a polymicrobial biofilm. *Med J Armed Forces India*. 2015 Jul; 71 (suppl 1): 95-8.
5. Takahashi A., Sugawara C., Kudoh K., Y. Yamamura, Ohe G, et al. Lingual tonsillolith: prevalence and imaging characteristics evaluated on 2244 pairs of panoramic radiographs and CT images. *Dentomaxillofac Radiol* 2018; 47(1):1-7.
6. Takahashi A, Sugawara C, Kudoh T, Uchida D, Tamatani T, et al. Prevalence and imaging characteristic of palatine tonsilloliths detected by CT in 2,873 consecutive patients. *The Scientific World J* 2014; 2014: 1-4.
7. Misirlioglu M, Nalcaci R, Adisen MZ, Yardimci S. Bilateral and pseudobilateral tonsilloliths: three dimensional imaging with cone-beam computed tomography. *Imaging Sci Dent* 2013; 43(3): 163-9.
8. Dykes M, Izzat S, Pothula V. Giant Tonsillolith-a rare cause of Dysphagia. *J Surg Case Rep* 2012; 4: 1-4.
9. Balaji BB, Avinash TML, Avinash CKA, Avinash A, Chittaranjan B. Tonsillolith: a panoramic radiograph presentation. *J Clin Diagn Res* 2013; 7(10): 2378-9.
10. Sieber S, Hat J, Brakus I, Biocic J, Brajdic D, Zajc I, et al. Tonsillolithiasis and orofacial pain. *Gerodontology* 2012; 29(2): 1157-60.