Tonsilloliths were a source of scientific discussion for a long time. As they contain mainly calcium some preferred to focus solely on their mineral component. The notion of those tonsilloliths being related to Tonsils, Tonsil Stones, and Halitosis

INTRODUCTION

Tonsilloliths were a source of scientific discussion for a long time. As they contain mainly calcium some preferred to focus solely on their mineral component. The notion of those tonsilloliths being related to Tonsils, Tonsil Stones, and Halitosis

RESULTS

Some patients who had LTC required a second procedure with an overall rate of 1.16 procedures per patient. In almost 40% of these patients the tonsilloliths were hidden behind the anterior pillars and only careful retraction could reveal them. It appeared that stones were more common in the upper tonsillar pole and less on the lower pole. Improvement on the self reported HALT questionnaire was 46% (P<0.05). There appeared to be no connection between tonsillar size and tonsillolith production with patients with small to medium size tonsils producing large tonsilloliths once the tonsils were pushed medially following lateralization of the anterior pillar.

DISCUSSION

Since tonsilloliths are biofilms the only solution to totally clear them is via mechanical disruption and ablate the base with laser or surgical resection. Therefore, a careful tonsil retraction is a search for tonsilloliths specifically addressed with two hand pillar retraction. Advantages include: from the patient’s perspective, the elevation of the anterior pillar allows the tonsil medially allows a clear visualization of the tonsil with a clearer plan for the procedure. Moreover, while a tonsillar massage will push the tonsillolith deeper into the crypts, this method will do quite the opposite, by exteriorizing the crypts and revealing hidden located crypts resulting with better identification of areas needed to be treated. This method also discloses the tonsils that on a regular one hand oropharyngeal exam using one tongue blade will be missed (figures A and B). By comparison of the same tonsil in A&B (as the depth of the picture is different we compared the tonsil to itself) and comparing the height to width measurement with this exposure method the ratio of height to width was 60/30 (=2) while without was 10/3 (=3.33). Assumming the same anterior posterior ratio we gain over 250% additional tonsil size. This method used for the evaluation of tonsilloliths will answer that need precisely by localizing tonsilloliths and the exact location and the depth of tonsillar crypts (figures C and D). This method allows mapping of the tonsillar site for more accurate and complete crypt vaporization with laser, thus causing less perpetual damage and potentially minimal post operative pain. Laser tonsillotomy potentially offers an advantage over standard tonsillectomy when pain, intra-operative hemostasis, re-bleeding and post-operative inflammatory reaction is concerned as suggested by Jiang. Another confirmation for minimal complication arises from Eisfield who observed 181 CO2 laser tonsillotomies. In his observation post operative bleeding was 0%, repeated infection was 3% with a follow-up period of six years. CO2 laser tonsil cryptolysis in process is seen in figure E. As LTC is performed under local anesthesia it offers a greater patient comfort and no down time. The HALT questionnaire allowed us to score patient satisfaction in reduction of halitosis, our results showed clearly a significant reduction of 46% in HALT scores.

CONCLUSIONS

Tonsilloliths were a source of scientific discussion for a long time. As they contain mainly calcium some preferred to focus solely on their mineral component. The notion of those tonsilloliths being related to Tonsils, Tonsil Stones, and Halitosis

METHODS AND MATERIALS

When tonsilloliths are sought, a two hand technique using two wooden tongue blades is used. One hand gently depresses the tongue with a tongue depressor, while the other hand depresses the blade of the anterior pillar (paraglossal arch) vertically bringing the tonsil medially and gently squeezing its contents. The tonsilloliths that are hidden from view, particularly at the upper pole and deeper section of tonsil hidden behind the anterior pillar will come in view. The stones are stained with an offensive smell of the tonsillolith being confirmatory for the source of halitosis. Since 2010 approximately 50 patients completed HALT before and after LTC and the location of the tonsilloliths were mapped and noted. Ablation of the upper corner of the anterior pillar is performed during LTC to expose the superior pole of the tonsil enabling complete discovery of new crypts. Then the tonsil lymphoid tissue is ablated with CO2 laser scanning device to evaporate the tonsil surface layer by layer.

REFERENCES


CONTACT

Yosef Krespi, M.D.
Lenox Hill Hospital
Email: ykrespi@nhhs.edu
Phone: 212-434-4500
Website: www.nyhd.org