Sialodocholithiasis and Sialadenitis Secondary to Large Mandibular Tori: A Case Report

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Background

- Mandibular tori (MT), or torus mandibularis, are bony outgrowths of the lingual surface of the mandible, with an unknown etiology, affecting 10-30% of adults[1].
- They are generally asymptomatic; however, recent reports suggest that large MT may play a role in the development of sialadenitis and sialolithiasis due to obstruction of Wharton's duct.

Case Description

- A 58-year-old woman presented with a relapsing course of painless bilateral submandibular neck swelling and dysgeusia.
- Physical examination showed large mandibular tori, obstructing view of Wharton's ducts bilaterally. A stone was visualized at the opening of the right Wharton's duct upon raising the tongue to the roof of the mouth.
- CT revealed sialadenitis of the right submandibular gland with sialodocholithiasis in the presence of large MT obstructing Wharton's ducts bilaterally.
- Bedside sialodocholithotomy was performed utilizing a trans-oral duct cutdown and was more difficult in the presence of large MT.
- Expression of thickened, purulent saliva followed by clear saliva from the right Wharton's duct signaled relief of obstruction.
- The patient's symptoms resolved with a post-operative course of antibiotic therapy.

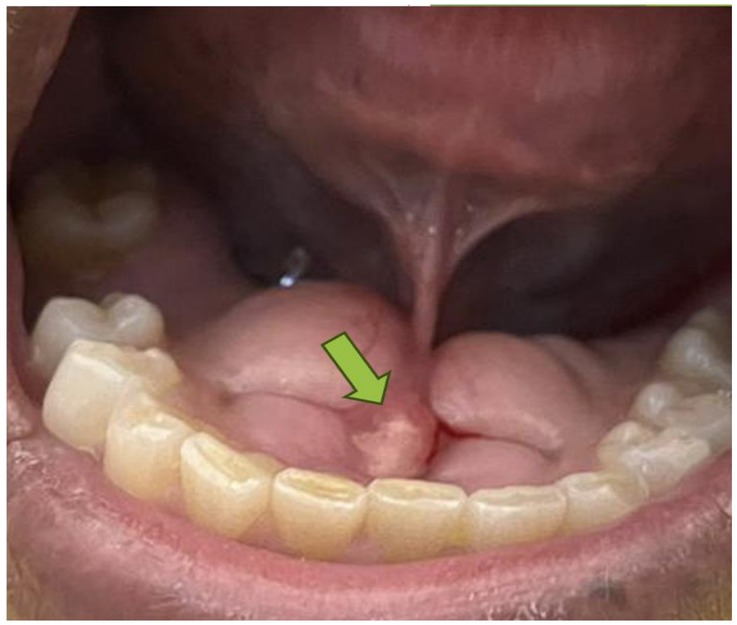

Figure 1: Patient's stone in the right submandibular duct (indicated by the green arrow) with large mandibular tori present bilaterally

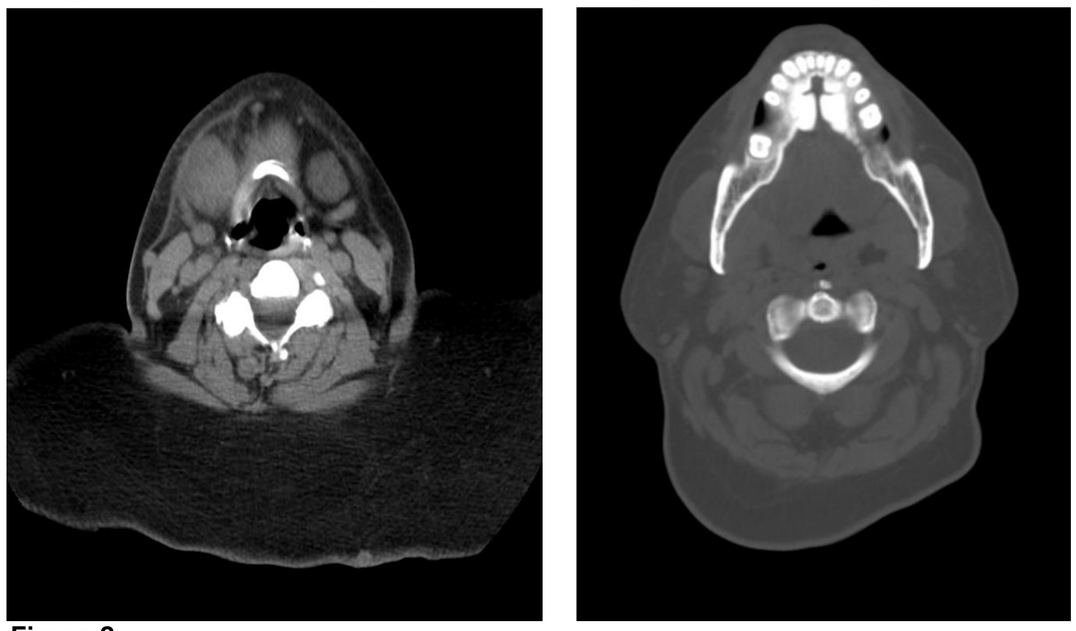

Figure 2:

a. Non contrast CT of the neck, soft tissue windows, showing an enlarged right submandibular gland with surrounding inflammation, consistent with sialadenitis
b. Non contrast CT of the neck, bone windows, showing prominent mandibular tori

Discussion

- Mandibular tori are nonpathological bony outgrowths that can obstruct adequate oral hygiene, impair occlusion, or impair ductal access[2,3].
- Large mandibular tori can obstruct the submandibular duct leading to sialadenitis and potentially increase the risk of sialolith development[3].
- In this case and others, MT have been shown to delay diagnosis and treatment of sialoliths by preventing ductal access.
- Due to the demonstrated size related complications of mandibular tori, future research should be done on other potential local effects of these outgrowths like ductal obstruction.
- Additional research into the role of elective removal of MT in diagnosis and treatment of salivary gland disorder should be considered.

Conclusions

- This case highlights the potential impact of large mandibular tori (MT), particularly their role in obstructing Wharton's duct and contributing to salivary gland disorders.
- While MT are typically asymptomatic, their presence can complicate the diagnosis and management of sialadenitis and sialodocholithiasis.

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