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Sublingual sialolith: Rare case report

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ABSTRACT

Sialolithiasis a common salivary gland disease seen in middle aged male patient. About 80% of cases are seen involving submandibular gland. Involvement of sublingual sialolith is rare. Salivary calculi form by desquamated cells or mineral salts depositing around a bacterial nidus. It is important to identify which gland is involved as they are managed by different surgical approaches. We report a rare case of sublingual salivary calculi which was surgically treated.

KEYWORDS: salivary gland swelling, sialography, floor of the mouth

Introduction

Sialolith is the most common salivary gland disease seen in middle aged males. [1] Most common site is submandibular gland duct followed by parotid gland duct. [2] Only 1 to 6.5% cases involve sublingual gland. The higher incidence of sialolith in submandibular gland is due to viscosity and alkalinity of saliva, higher amount of mineral salts like calcium with a tortuous ductal course. [3] The saliva of sublingual gland is mucous type with the viscosity six times that of submandibular gland. [2] We report a rare case of sublingual sialolith in a 32 years old male patient.

Case report

32 years old male patient presented with chief complaint of a swelling with pain below the tongue. Patient had a habit of cigarette smoking two times a day and no other associated significant history was present. Intraoral inspectory findings revealed a sublingual solitary, oval swelling on the right side of lingual frenum measuring about 1x0.5cm in diameter. Palpatory findings revealed swelling was hard in consistency, well defined without mobility or fluctuation.

Occlusal radiographic findings revealed a well defined oval radiopacity in the sublingual region lateral to the midline. It was suggested to be salivary gland sialolith. Routine blood examination was within normal limits. Following this an excisional biopsy was done. Patient was under follow up and presented no complications.

Discussion

Sublingual and minor salivary glands are the rare sites of sialolithiasis. Patient presents with a complaint of painful swelling on eating.[4] The salivary calculi form by organic nidus followed by deposition of inorganic materials from saliva. Other proposed etiological factors could be inflammatory, infectious or foreign bodies etc. in the present case poor oral hygiene could be a predisposing factor. [5] Differential diagnosis includes viral and bacterial sialadenitis, sjogren's syndrome. [6]

The sublingual sialolith is treated via transoral approach by resection of sublingual gland. So it is important to know the location of stone and the gland involved before planning the surgery. [7] In case of sublingual abscess, painful swelling unilaterally in the floor of the mouth is noted contrast to submandibular abscess which presents as swelling in submandibular neck region. [6] Management includes administration of sialogogues with warm heat application. Massaging of the gland is helpful in pushing the stone out of the duct. Incision placed over the orifice of salivary gland duct can help in expulsion of stone. [7] But it can lead to infection and bleeding. Bigger sialoliths are treated by fragmentation using a lithotripser. Untreated sialoliths can lead to infections. [5]

Conclusion

Sublingual sialolith is quite uncommon and can be misdiagnosed as submandibular sialolith. Proper diagnosis is important due to the different surgical approaches.

Figures and legends

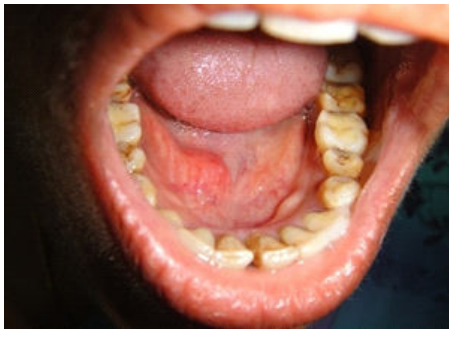

Fig 1 intraoral examination reveals erythematous solitary elevated area in the floor of mouth lateral to midline

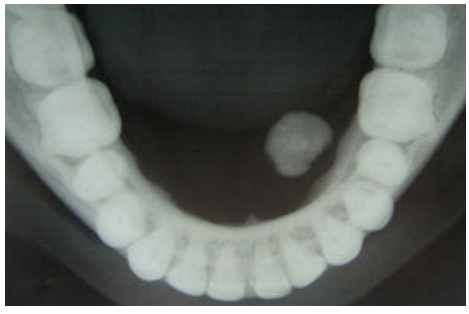

Fig 2 mandibular occlusal radiograph reveals radiopaque lesion in the sublingual region

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