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EVENING

Sialolithiasis

Sialolithiasis is a condition in which a formation of stones also known as sialolith form and reside in salivary glands and their ducts. A sialolith looks like a calcified mass yellow to white in color which blocks the flow of saliva. If sialolith does not get treated it may grow and leads to sialadenitis, which is caused by bacteria that presents with tenderness, pain, redness with asymatric swelling to localized area. Sialolithiasis is benign, most commonly appears in submandibular gland or within the Whartons duct itself.

Etiology of a sialolith is thought to occur because of a combination of the saliva with calcium concentrations, usually high in alkaline with very low salivary flow or even xerostomia. The most common area for a sialolith to form is in submandibular gland is because of its anatomical structure. For that reason being, most of our saliva pools in the floor of the mouth. In addition sublingual and submandibular glands produce more mucous and are very thick in consistency, unlike the parotid which secrets mostly serous and watery saliva. This is more of a reason for the stones to form in the floor of the mouth.

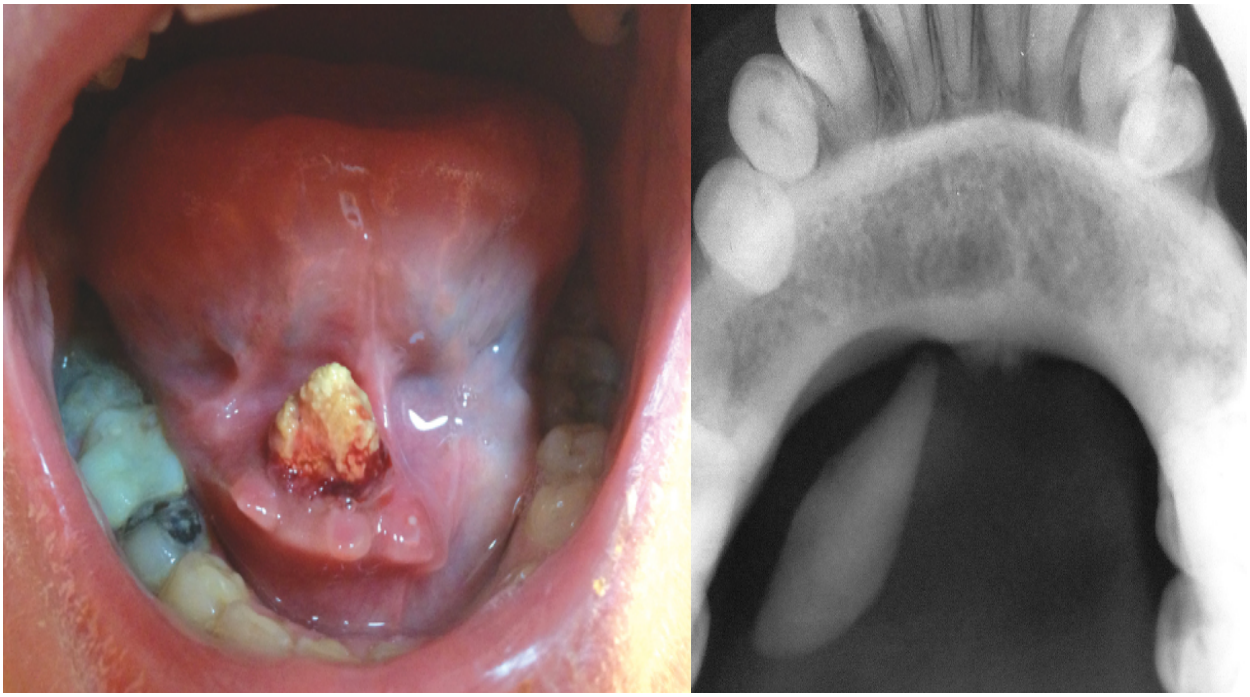
Clinically sialolithiasis presents commonly in men over women, very unlikely to occur in pediatric patients therefore, its only seen in adults. A sialolith is found to occur more in the submandibular gland and Wharton’s duct in 85% while 15% can take place in other salivary glands but it has the least chance of taking place in the parotid gland.

However, oftenly it resides in the duct itself rather than within the gland which causes decreased flow of saliva. The yellow/white stone can start out at 1X1cm and grow every year. In the article Submandibular Sialolithiasis Perforating the Floor of Mouth: A Case Report, a 52 year old women presented with a quite large sialolith measuring a length of 2.5cm. This can also be detected in radiographs as radio opaque. Most of the time this condition comes with no symptoms and can even be barely noticeable, but eventually once the sialolith starts to grow in size the more closure it produces to the duct, resulting in pain and ultimately face swelling.

Treatment for a small sialolith include massaging the gland, hydration and drugs that increase salivary flow which in return promote the stone to be disloged out of the duct and tissue. As seen in the picture below, the 52 year old women was not given any anesthisea and the doctor used only forceps to remove. However, if the stone were impacted the procedure would have been invasive, known as “sialodochoplasty.” This procedure consists of cutting open the duct and removing the stone, followed by suturing the tissue. After removal of the stone the ducts should be tested to be working properly. If exudate is evident around the stone, antibiotic are also prescribed as part of treatment. Prognosis for this condition is very successful, especially the none invasive procedures.

According to the article Sialolithiasis, this lesion can be similar to cellulitis, most likely due to the fact to the face swelling, and the abcess that can be found surrounding the stone. In my opinion if the stone grows within the salivary gland it may look like a swollen/enlarged gland.

This condition is relevant for dental hygienist because the stone can block the flow of saliva which as we know our saliva is our natural buffer which aids in neutralizing acids. This is also important when doing extra oral and intra oral examination. While palpating the submandibular area, a hard fibrotic gland is not expected. Also intra orally, while using a Qtip on major salivary glands, they should not be inflamed with white stones sticking out. Assessing these conditions could impact greatly on our diagnosis and what to explain to our patients.



Kurtoğlu, Gökhan et al. “Submandibular Sialolithiasis Perforating the Floor of Mouth: A Case Report.” *Turkish archives of otorhinolaryngology* vol. 53,1 (2015): 35-37. doi:10.5152/tao.2014.251

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