

Sialolithiasis



PLAY PICMONIC

Characteristics

Stone Formation

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Sialolithiasis is caused by the presence of stones that can occur due to compositional or anatomical reasons. Anatomical causes include a defect in saliva formation or flow. Defects of flow can be caused by inflammation or stenosis of the duct. Compositional reasons, on the other hand, include an increase in calcium content or altered enzyme function.

Ducts of Major Salivary Glands

Duck Major Salivary-gland

Sialolithiasis is characterized by the formation of stones in the ducts of major salivary glands. It may be seen in parotid, submandibular, or sublingual gland.

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Clinical Manifestations

Recurrent Periprandial Pain

Recurring-clock Pear-eating Pain-bolts

Patients can experience pain that worsens with meals. It is known as a recurrent periprandial pain. This pain will also cause the patient to have problems with swallowing and opening their mouth.

Swelling

Swollen

Sialolithiasis patients commonly have a history of unilateral swelling of the salivary glands.

Trouble Swallowing

Swallow in Trouble

Patients can experience trouble swallowing or opening their mouths due to the mass effect.

Associations

Dehydration

Empty-canteen

Dehydration has been associated with sialolithiasis. The lack of water in the saliva causes other components inside the saliva, such as calcium and phosphate, to crystallize. These also can be triggered by the use of diuretics.

Smoking Tobacco

Smoking Cigarettes

Smoking tobacco has been associated with decreased salivation, which may contribute to the development of salivary gland stones.



Trauma

Trauma-spike

Sialolithiasis can be associated with trauma due to subsequent stenosis to the ductal wall. Other possible causes are autoimmune diseases, smoking, and radiation therapy to the mouth.

Treatment

NSAIDs

N-sad

NSAIDs are used to treat pain in sialolithiasis patients. Antibiotics can be considered for use in patients with signs of infection.

Stimulation of Salivary Flow

Salivating Stim-mule

Stimulation of salivary flow can be triggered by a gentle massage or the use of sialagogues. This method is commonly used to treat small sialoliths. Sialagogues work by increasing the saliva flow. Slaframine is one example.

Antibiotics

ABX-Guy

If sialolithiasis patients also have signs of infections, antibiotics can be considered. Signs of infection may include redness around the salivary duct, purulent discharge from the salivary ducts, or cervical lymph node swelling.

Surgery

Surgeon

Surgery should be suggested based on the sialolith's size, number, and location if conservative management fails. If the stone is too large, stuck, and blocks the duct, it can be indicated for treatment with surgery.