SALIVARY GLANDS PATHOLOGY.

ACUTE AND CHRONIC SIALODENITIS

- Etiology
- Classification
- Clinical diagnosis
- Prevention
- Treatment
- Prevention of complications.

SALIVA-STONE DISEASE

1. Etiology
2. Pathogenesis
3. Clinical features
4. Differential diagnosis
5. Treatment

<table>
<thead>
<tr>
<th>MUCOCELE</th>
<th>RANULA</th>
<th>SALIVARY DUCT CYST</th>
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<tbody>
<tr>
<td>The prognosis is excellent mucoceles will recur necessitating re-excision, especially if the feeding glands are not removed.</td>
<td>mucoceles that occur in the floor of the mouth.</td>
<td>Typically appear as solitary</td>
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<tr>
<td></td>
<td></td>
<td>asymptomatic</td>
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<tr>
<td></td>
<td></td>
<td>mobile</td>
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<tr>
<td></td>
<td></td>
<td>non-tender swellings covered by an intact epithelium.</td>
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<td></td>
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<td>They are usually the same color as the surrounding tissue.</td>
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SIALOLITHIASIS

Clinical features

1. Salivary gland stones occur most often in the submandibular gland ducts
2. also occur in the minor glands of upper lip and buccal mucosa.
3. Young & middle-aged adults (most frequent) affected.
   - episodic pain & swelling around mealtime.
   - Stones in the terminal ducts can be palpated.
   - If the sialolith is well calcified, it may appear on radiograph as a radiopaque mass.
   - Minor gland stones are often asymptomatic.

Treatment

- Deposition of calcium salts around a nidus of debris in the duct lumen occurs but the exact cause of this is unknown.
- The blockage of the duct and resultant inflammation can cause significant damage to the gland.
- Small sialoliths can sometimes be removed by:
  1. gentle massage
  2. sialagogues
  3. moist heat
  4. increased fluid intake
  5. Larger stones are removed surgically.
- Stones in minor glands/ducts are best treated by surgical removal including the associated gland.
• Inflammation of the salivary glands can arise from various infectious and non-infectious causes.
• The most common viral infection is mumps.
• Most bacterial infections arise as a result of ductal obstruction or decreased salivary flow.
• One of the more common causes of sialadenitis is recent surgery.

SIALADENITIS

Cause
• The inflammation of the glands can arise for various causes as noted previously.
• While mumps is the most common viral cause, other viruses such as Coxsackie A, ECHO, choriomeningitis, parainfluenza and cytomegalovirus may be the cause.
• The most common cause of acute bacterial sialadenitis is *Staphylococcus aureus* but streptococci and a host of other bacteria have been implicated at different times.
• Medications that can induce xerostomia can predispose the patient to infection.
• Non-infectious causes include Sjögren syndrome, radiation therapy, sarcoidosis and some allergens.

<table>
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<tr>
<th>Acute bacterial sialadenitis</th>
<th>Chronic sialadenitis</th>
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<tbody>
<tr>
<td>is most common in the parotid where it produces a painful swelling.</td>
<td>is associated with periodic swelling and pain.</td>
</tr>
<tr>
<td>The overlying skin may be erythematous</td>
<td>Subacute necrotizing sialadenitis is more common in young (males?) adults.</td>
</tr>
<tr>
<td>the patient may have low-grade fever, trismus &amp; purulent discharge.</td>
<td>The lesion usually involves the minor glands of the hard or soft palate.</td>
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<td>It appears as a painful nodule, which does not ulcerate/ slough like necrotizing sialometaplasia.</td>
</tr>
</tbody>
</table>

Treatment, Prognosis and Significance
1. Acute sialadenitis is treated by antibiotic therapy & rehydration to stimulate salivary flow.
2. Surgical drainage may be required if abscesses occur.
3. Management of chronic sialadenitis depends upon the severity and duration of the condition.
4. Subacute necrotizing sialadenitis is self-limiting and usually resolves in 2 weeks.
5. Significant inflammatory destruction of the salivary gland can occur requiring its surgical removal.

SIALORRHEA
• Overproduction of saliva can produce drooling & choking.
• Patients with idiopathic paroxysmal sialorrhea may have short episodes of excessive salivation associated with prodromal nausea or epigastric pain.

XEROSTOMIA
• dry mouth, is more common in females and the elderly.
• With decreased salivary flow, the saliva becomes foamy or thick and “ropy”.
• Lack of pollin of saliva in the floor/mouth and the mucosa appears dry.
• The dorsal tongue is often fissured with atrophy of the filiform papilla.

SJÖGREN SYNDROME
- Chronic, systemic autoimmune disorder involves the salivary & lacrimal glands.
- Predominantly affects middle-aged and older adults with 80-90 % of them being women.
- The principal oral symptom is xerostomia.
- A third to a half of all patients have diffuse, firm enlargement of the major salivary glands, usually bilaterally.

SIALADENOSIS (SIALOSIS)
- A non-inflammatory disorder characterized by salivary gland enlargement, most common of the parotid.
- Most cases present as a slowly developing, painless swelling of the parotids.
- Bilateral involvement.
- Decreased salivary secretion may occur.
- Demonstrates a “leafless tree” pattern.