 

**Oral Pathology**

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**Lecture 14 SALIVARY GLAND DISEASE**

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**SALIVARY GLAND DISEASE**

SALIVARY GLANDS :The glands are located in and around the mouth and throat.

The major salivary glands are :the parotid, submandibular and

sublingual glands.

They all secrete saliva into the mouth:

1-the parotid through ducts near the upper teeth

2-submandibular into the front portion under the tongue,

3-the sublingual through multiple ducts in the floor of the mouth.

In addition to these glands, there are hundreds of tiny glands called minor salivary glands located in the lips, inner cheek area (buccal mucosa) and extensively in other linings of the mouth and throat.

*Function of salvia:*

1- lubrication of food

2- speech

3- taste

4- oral clearance

5- digestion because it contains enzyme that help in food digestion

6- antibacterial effect

7- moisten the mouth

8- buffer system of saliva play a significant role in the protection against

damaging effect of changes in the PH following acid production by

plaque bacteria

CAUSES OF ABNORMAL GLANDS

**1. OBSTRUCTION**

Obstruction to the flow of saliva most commonly occurs in the

parotid and submandibular glands, usually due to:

1-stone formation.

Clinically: Symptoms typically occur when eating. Saliva production is initiated, but cannot exit the ductal system, leading to swelling of the involved gland and significant pain, sometimes with an infection.

2-Secondary infection of salivary glands from adjacent lymph nodes also occurs.

**2. INFLAMMATION**

1-If stones are not totally obstructive;

Clinically: the major glands will swell during eating and then gradually subside after eating, only to enlarge again at the next meal. Infection often develops in the abnormally pooled saliva, leading to more severe pain and swelling in the glands. If untreated long enough, the glands may become abscessed.

2-In some individuals the duct system of the major salivary glands may be abnormal. These ducts can develop small constrictions which decrease salivary flow, leading to infection and obstructive symptoms.

**3. INFECTION**

The most common salivary gland infection is mumps, which involves the parotid glands but submandibular and sublingual may be affected. While this is most common in children, it can occur in adults. The salivary gland enlargement may be gradually subside over a period of 7 days, the virus present in saliva 2-3 days before onset and 6days afterwards

Also infections occurring because of ductal obstruction or sluggish flow of saliva.

**4. TUMORS**

Primary benign and malignant salivary gland tumors usually show up as painless enlargements of these glands.

Malignant tumors of the major salivary glands can grow quickly, are painful, and can cause loss of movement of part or all of the affected side of the face.

**5- Auto-immune diseases** : Salivary gland enlargement is also seen in auto-immune diseases, which cause significant inflammation. Patients often have a dry mouth or dry eyes. This may occur with other systemic diseases such as rheumatoid arthritis and Sjogren syndrome. Diabetes may cause enlargement of the salivary glands, especially the parotid glands. Salivary gland swelling is also seen in alcoholics

**TREATMENT OF SALIVARY GLAND DISEASE**

Treatment of salivary diseases classified into two categories:

1-medical 2-and surgical. Selection of treatment depends upon the nature of the problem:

**1-If it is due to systemic diseases**: then the underlying problem process must be treated. This may require consultation with other specialists.

2-**If the disease process relates to salivary gland** obstruction and subsequent infection,1- antibiotics are used. 2-Sometimes instrumentation of the ducts will be needed.

If a mass has developed within the salivary gland, removal of the mass may be required:

1- surgically remove these masses.When surgery done, great care must be taken to avoid *damage to the facial nerve which lies within this gland*.

2- Radiation treatment will often be recommended after surgery. If masses is malignant