 **IQRA NATIONAL UNIVERSITY**

**DEPARTMENT OF ALLIED HEALTH SCIENCES**

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# ASSIGNMENT FOR VIVA

# Clinical consideration of salivary glands

 Saliva lubricates the surface of a denture,making the denture more compatible with the movement of the lips,tongue and cheeks.

 Retention of dentures is aided by saliva –

- Cohesion – layers of saliva between mucosa and denturebase

- Adhesion – between saliva and denture base

- Interfacial surface tension – in the film of saliva between denturebase and mucosa

- Capillary attraction - Atmospheric Pressure

 When the saliva is thin retention is effective,

 Viscous saliva reduces the cohesive forcely

 Thick ropy saliva is usually found in the palatal glands undermaxillary basal seat,it builds up and pushes

 Denture surface should be smooth so as to incerase the saliva flow

 In patients with xerostomia,the denture base sticks to the mucosa,this does not help in retention and is irritating to the patients.

 Excessive salivation is problematic during impression making –atropine sulphate can be orally administered

 Excessive secretions of mucus from the palatal glands may distort the impression material in the posterior 2/3 of palate

- palate massaged

- mouth irrigated with astringent

- palate wiped with gauze

# Clinical consideration of salivary glands

Careful examination of a patient’s medical history and profile can lend clues to dysfunction of the salivary glands because they are often associated with other systemic disorders such as hormonal imbalances, diabetes mellitus, arteriosclerosis, and neurological disorders.

**For example:**

Xerostomia (dry mouth), Sialorrhea (increase salivary flow), both could result from dysfunction of the madullary salivary center, autonomic innervations to the glands, damage to the gland itself, or imbalances in fluid and electrolyte

**Radiation caries:**

Radiation caries is a rampant form of dental decay that may occur in individuals who receive a course of radiotherapy that include exposure of salivary glands.

**Etiology (causes):**

Carious lesions are produced due to the exposure of salivary glands and reduced flow of saliva, decreased pH, decreased buffering capacity, and increased viscosity.

**Signs:**

Superficial lesions (abnormal change in structure) attack the buccal, occlusal, incisal, and lingual surfaces. It includes cementum and dentin in cervical lesions. Lesions progress around the teeth circumferentially and resulting in loss of the crown.

* **Sjogren’s syndrome:**

It consists of keratoconjunctivitis (inflammation of cornea and conjunctiva), xerostomia (dry mouth), and rheumatoid arthritis (inflammation of joint). The cause of the disease can be genetic, autoimmunological, etc.

Features include dry mouth and dry eyes due to hypofunction of lacrimal and salivary glands. Most patients are treated symptomatically; ocular lubricants and salivary substitutes are given.

* **Xerostomia (dry mouth):** It is defined as a subjective complaint of dry mouth that may result from a decrease in the production of saliva. It is not a disease but a symptom caused by many factors.

**Etiology (causes):**

* Sjogren’s syndrome (immune system disorder)
* Therapeutic radiation of head and neck
* Surgical removal of salivary glands
* Diabetes mellitus
* Acute viral infections involving salivary glands result in temporary xerostomia
* Anxiety, mental stress, and depression may temporarily decrease salivary flow

**Symptoms:**

* Oral dryness (most common)
* Halitosis (un-attractive odor/smell from mouth)
* Burning sensation (pain type)
* Loss of sense of taste or bizarre taste
* Difficulty in swallowing
* Tongue tends to stick to the palate
* Decreased retention of denture

**Signs:**

* Saliva pool disappears
* Mucosa becomes dry
* Tongue shows glossitis (inflammation of tongue) and fissured with papilla atrophy
* Angular cheilitis (red, swollen patches in the corners of mouth)
* Rampant caries at the cervical or cusp tip
* Periodontitis
* Candidiasis (fungal infection)

**Other consideration:**

* Viral inflammation of the gland causes it to swell, resulting pain on movement of the jaw.
* Abscesses or cysts of the gland may result in pressure to the facial nerve.
* Stones or calculi in the duct can block it, causing painful swelling of the gland.
* Aplasia, Atresia, stafnnes cyst, Fordyce's granules, local/systemic disease, endocrine, autoimmune, infectious etc
* PAROTID GLAND
* Because of fibrous fascia is covering the parotid, its inflammatory swelling is tense and hard.
* Parotid duct is slightly larger along their course than at their caruncle.
  + This permits storage of secretions so that a ready flow may be available on stimulation without waiting for secretary process.
* This relatively static reservoir may form obstructions and are a ready nidus for bacterial activity.
* The close association of the facial nerve with the gland is very important consideration, during surgical procedures.
* SUBMANDIBULAR GLAND
* The entire submandibular gland and duct system lies in a dependent position, which predisposes it to retrograde invasion by oral flora.
* Similar to the parotid duct, the Wharton's duct is also wider before reaching the papilla. This can lead to sangulation of saliva and organic matter.
* The sharp bends of Wharton's duct at the posterior border of the myohyoid muscle allows stasis of the saliva favoring the formation of salivary stones.
* SUBLINGUAL GAND
* The sublingual gland and the minor salivary glands have short ducts, where the chances of stasis are less.
* Thus obstructive lesions do not occur in the glands.
* Since minor salivary glands are placed superficially, the traumatic lesions such as mucoceles commonly effect these glands.