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**Ans Q No. 01.**

**Fibrous capsule and A reticular Disc.**

1. **Fibrous Capsule**.

Fibrous capsule is a fibrous membrane that surrounds the joint.

And its attach to the the articular eminence.

Like the articular disc and neck of the mandibular condyle.

1. **Articular Disc.**

Articular disc is the unique feature of the TMJ.

Composed of fibrocartilagenous tissue.

Disc devided the joint into two compartment.

Upper synovial cavity and lower synovial cavity.

Central area of the articular disc get nutrients from the synovial fluid.

Shape is oval.

It make articular surface.

Its functions are

1. Stabilize the TMJ.
2. Make articular surface.
3. Reduce wear of TMJ.
4. Lubrication.

**Note .**

Thus the fibrous capsule surrounds the TMJ while disc is the fibrocartilageous tissue that devided the TMJ into two comportment. So articular disc is the component of fibrous capsule .

**Ans Q No.02..**

**Clinical consideration of salivary glands.**

In salivary we have the following changes with age.

Gernalized loss of parenchymal tissue.

Increase in fibrous connective tissue.

Decrease production of saliva.

Loss of salivary cells and replace by adipose cells.

Reduction of saliva production of major salivary glands.

Clinically we have to consider the salivary glands for the following disease.

1. **Radiation caries.**

It happened when we recive a course of radiotherapy of salivary glands.

Causes.

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

Signs.

Abnormal changes in structures superficial

Attack on buccal,occlusal,incisal,and lingual surface.

Dentine enamel and cervical surface are effected.

In result loss of crown.

1. **Sjogrens syndrome.**

It consist of keratoconjunctivitis, xerostomia(dry mouth), and rheumatoid arthritis(inflammation of joint).

The cause of disease can be genetic,autoimmunological,etc.

Signs include dry mouth and dry eyes due to hypofunction of lacrimal and salivary glands.

1. **Xerostomia dry mouth.**

It is as result of decreased in production of saliva.

It is not a diseas but symptom caused by many factors.

Causes.

Immune system disorder.

Therapeutic radiation of head and neck.

Surgical removal of salivary glands.

Diabetes mellitus.

Anxity,mental stress and depression.

Symptoms.

Oral dryness.

Halitosis.

Burning sensation.

Loss of taste.

Difficulty in swallowing.

Tongue tends to stick to the plate.

Decreased retention in denture.

Signs.

Saliva pool disappears

Mucusa become dry

Tongue shows glossitis.

Angular cheilitis.

Caries

Periodontitis.

Candidiasis.

**Other consideration.**

Inflammation of virus can cause it to swell.

Abscesses OR cyst may result in pressure to the facial nerve.

Stones can block the duct and causes painfull swelling to the gland.

Aplasia, Atresia, Stafnnes cyst, Fordycs granules, local systemic disease,endocrine,autoimmune infection etc.

**Ans Q No 03.**

Factors that plays role in shading.

We have the following factors that plays role in shading.

1. Odontoclast
2. Pressure.
3. **Odontoclast.**

When root resorption is almost complete,these odontoclasts degenerate,and mononuclear cells emerge from pulpal vassels and migrate to the predentin surface. Less is known about the resorption of soft tissues as it sheds

Just before exfoliation ,resorption ceases as the odontoclasts migrate away from the dentin surface.

The tooth sheds with some pulpal tissues intact.

**2. Pressure**

The pressure exerted by the erupting permanent teeth seem to play an important role in resorption of deciduous teeth.

The local pressure is responsible for initiation of resorption .

In addition to this local pressure , heavy masticatory and muscular forces play a role in resorption .

**Ans Q No04.**

**Classification of tooth movement.**

The term physiological tooth movement primarily refers to the slight tiping of the tooth and its socket and secondary to the changes in tooth position that occur during and after tooth eruption.

**Types of tooth movement.**

1. Physiologic tooth movement
2. Eruption
3. Drifiting.
4. Phatologic tooth movement
5. Periodontal pathology
6. Oral pathologies ( cyst,tumors etc ).
7. Orthodontic tooth movement.
8. Tooth movement under external clinical forces.
9. **Physiologic tooth movement.**

Naturally occurring tooth movement that take place and after tooth eruption. This include

1. Tooth eruption
2. Migeration OR drift of teeth.
3. Changes in tooth position durin mastication.
4. **Pathologic tooth movement.**

Pathologic Migeration is defined as change in tooth position resulting from disruption of the forces that maintain teeth in normal position in relation to arch.it mostly commen in interior teeth. E.g daistema.

1. **Orthodontic tooth movement.**

It is a pathological forces from which the tissue recovers.

Orthodontic movement bring about areas of pressure and tension around thr tooth.

The histologic changes seen during tooth movement vary according to the amount and duration af force applied.

**Ans.Q No.05**.

**Temporomandibular joint (TMJ).**

TMJ is a ginglymoarthrodial joint a term that is derived from ginglymus, means a hinge joint which allow motion backward and forward.

TMJ is a mobile joint formed between head of mandible and articular fossa of temporal bone.

The TMJ is the joit of jaw frequently refer to as TMJ.

**Function of TMJ.**

1. Speech
2. Mouth opening and closing.
3. Mastication.
4. Chewing.
5. Occlusion of the jaws with each other
6. Joint the head with mandible.
7. Shape to the mouth

**Component of TMJ.**

1. Ligaments.
2. Fibrous capsule.
3. Articular disc.
4. Lateral lagements of jaw.
5. Sphenomandibular lagements.
6. Stylomandibular lagements.
7. Mandible head
8. Condyle
9. Temporal bone
10. Superficial temporal artry
11. Auriculotemporal nerve,masseteric nerve.
12. Synovial cavity
13. Synovial fluid.
14. Muscles like temporalis, masseter , lateral and medial pterygiod.