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Q.1. Distinguish the fibrous capsule and articular disk?

Ans.

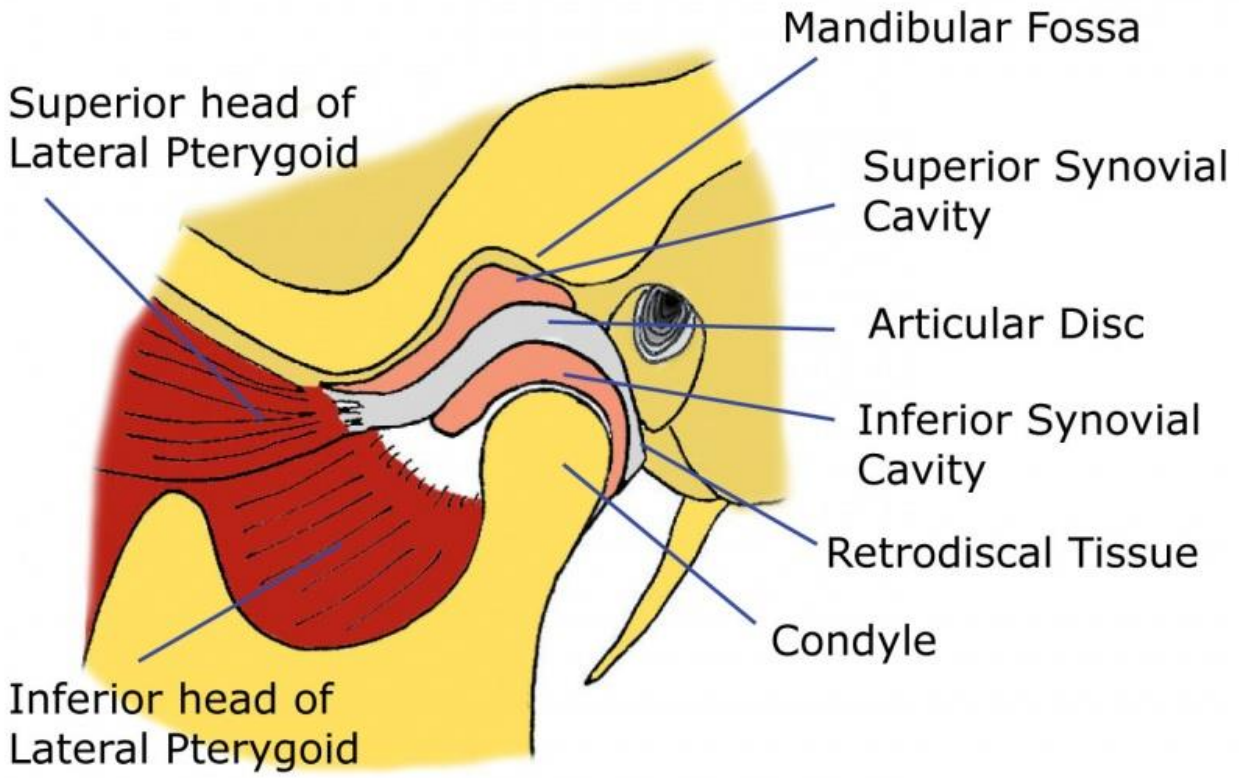
FIBROUS CAPSULE: -

The capsule is a fibrous membrane that surrounds the joint and attaches to the articular eminence, the articular disc and the neck of the mandibular condyle.

ARTICULER DISC:-

The articular disc is a

fibrous extension of the capsule that runs between the two articular surfaces of the temporomandibular joint. The disc articulates with the mandibular fossa of the temporal bone above and the condyle of the mandible below. The disc divides the joint into two sections, each with its own synovial membrane.



The Temporomandibular Joint

FUNCTION OF ARTICULER DISC:-

>Stabilize the TMJ

>Make articular surface

>Reduce wear of TMJ

>Lubrication

Q.2. Write a short note on the clinical consideration of salivary glands?

Ans.

AGE CHANGES: -

>Generalized loss of parenchymal tissue

>Increase in fibrous connective tissue

>Decrease in production of saliva

>Lost salivary cells often replaced by adipose cells

>Gradual reduction in proportional acinar volume in major salivary glands

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

CLINICAL CONSIDERATION:-

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.

Q.3.Describe the factor that play a role in shading?

Ans.

SHEDDING:-

The physiologic process resulting in the elimination of the deciduous dentition is called shedding or exfoliation.

The main factor which play role in shedding of teeth are the odontoclast and pressure from the successional tooth.

ODONTOCLAST:-

When root resorption is also complete,these odontoclasts degenerates, and momonuclear cells emerge from pulpal vessels and migrate to the predentin surface.

Less is known about the resorption of soft tissue as it sheds.
Just before expoliation,resorption ceases as the odontoclasts migrate away from the dentin surface.
The tooth sheds with some pulpal tissue intact.

PRESSURE:-

the pressure exerted by the erupting permanent teeth seem to play in 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 musculer forces play a role in resorption.

Q.4. Explain the classification of tooth movement?

Ans.

(CLASSIFICATION OF TOOTH MOVEMENT)

(1) PHYSIOLOGIC TOOTH MOVEMENT:-

These preeruptive movements of deciduous and permanent tooth germs place the teeth in a position within the jaw for eruptive movement. These preeruptive movements of teeth are a combination of two factors: (1) total bodily movement of the tooth germ and (2) growth in which one part of the tooth germ remains fixed while the rest continues to grow, leading to a change in the center of the tooth germ.

(2) PATHOLOGIC TOOTH MOVEMENT:-

Pathologic migration is defined as change in tooth position resulting from disruption of the forces that maintain teeth in normal position in relation to their arch. The disruption of equilibrium in tooth position may be caused by several etiologic factors.

(3) ORTHODONTIC TOOTH MOVEMENT:-

Orthodontic tooth movement is a process in which the application of a force induces bone resorption on the pressure side and bone apposition on the tension side. Thus, conventional tooth movement results from biological cascades of resorption and apposition caused by the mechanical forces. The term physiological tooth

movement primarily refers to the slight tipping of the tooth in its socket and secondarily to the changes in tooth position that occur during and after tooth eruption.

Q.5.Enlist the function and component of TMJ?

Ans.

TMJ:-

The temporomandibular joint (TMJ) is formed by the articulation of the mandible and the temporal bone of the cranium. It is located anteriorly to the tragus of the ear, on the lateral aspect of the face.

In this article, we shall look at the anatomy of the temporomandibular joint – it's

articulating surfaces, ligaments and clinical correlations.

ARTICULATING SURFACES:-

The temporomandibular joint consists of articulations between three surfaces; the mandibular fossa and articular tubercle (from the squamous part of the temporal bone), and the head of mandible.

This joint has a unique mechanism; the articular surfaces of the bones never come into contact with each other – they are separated by an articular disk. The presence of such a disk splits the joint into two synovial joint cavities, each lined by a synovial membrane. The articular surface of the bones are covered by fibrocartilage,

not hyaline cartilage.

FUNCTION:-

Movements at this joint are produced by the muscles of mastication, and the hyoid muscles. The two divisions of the temporomandibular joint have different functions.

Protrusion and Retraction

The upper part of the joint allows protrusion and retraction of the mandible – the anterior and posterior movements of the jaw.

The lateral pterygoid muscle is responsible for protrusion (assisted by the medial

pterygoid), and the posterior fibres of the temporalis perform retraction. A lateral movement (i.e. for chewing and grinding) is achieved by alternately protruding and retracting the mandible on each side.

Elevation and Depression

The lower part of the joint permits elevation and depression of the mandible; opening and closing the mouth. Depression is mostly caused by gravity. However, if there is resistance, the digastric, geniohyoid, and mylohyoid muscles assist. Elevation is very strong movement, caused by the contraction of the temporalis, masseter, and medial pterygoid muscles.