

Course Title: Histology II

Instructor: Ms. Salma

Ishaq

Max Marks: 50

NOTE:

Final term

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Each question carries 10 marks.

Q1: Distinguish the fibrous capsule and articular disc?

Answer,.. 1] FIBROUS CAPSULE

It is component of temporomandibular joint above to the interior edge of the preglenoid plane, posteriorly to the squamous tympanic fissure, between these two edges of the articular fossa. Below to the periphery of neck of mandible. It is a membrane like structure that produce synovial fluid to lubricate the joint. It is attached with articular eminence, articular disk and neck of the mandibular condyle.

2]ARTICULAR DISC

It is a FIBROUS cartilaginous DISC dividing joint cavity upper and lower component. It's shape is oval like and made articular surface. It stabilized the temporomandibular joint. It reduces wear in joint and made it lubricated. It is a fibrous extensions of capsules that move between two articular surface of the temporomandibular joint. It is a thin disk with oval shape and made of fibrous connective tissue, have non vascular nature and found the condyle of mandible and mandibular fossa. It upper surface is convex and concave to form mandibular fossa and articular tubercle.

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

Answer.,, CLINICAL CONSIDERATION OF SALIVARY GLANDS

Clinical examination of the patients can leads to dysfunction of salivary glands.,because they associated with hormonal imbalances ,diabetes mellitus like abnormalities. For example,

A] XEROSTOMIA.,, it is a condition of dry mouth that leads to the dysfunction of salivary glands and autonomic innervation to glands.

B] RADIATION CARIES.,,..Exposure of salivary glands to high radiotherapy can create this condition in tooth.

C]ETIOLOGY...,,Various lesions are found due to exposure of salivary glands to radiation,that leads to reduce salivary in mouth.

D] SJOGREN SYNDROME...,,It composed of keratoconjunctivitis of cornea and conjunctiva,xerostomia and rheumatoid arthritis. Lacrimal and salivary glands hypofunction leads to dry mouth and eyes.

E] ETIOLOGY...,,That condition is caused by immune system disorders, therapeutic radiotherapy of neck and head and surgical removal of the salivary glands.

PAROTID GLAND

It has fibrous fascia is formed parotid,its swelling is tense and hard.The close associated facial nerve with glands is very important consideration during surgical procedure.

SUBMANDIBULAR GLAND

Entire gland lies in dependent position, which predisposed it to retrograde invasion by oral flora.

SUB LINGUAL GLAND

They have short ducts where chance of stasis are less.

Q,,3,, Describe the factors that play role in shedding?

Answer,,. ODONTOCLAST

ODONTOCLAST are degenerate when root resorption is complete and emerging of mononuclear cell occurs from pulps vessels and migrate to the presenting surface. Soft tissue less take part in resorption. Just before exfoliation, resorption ceases as iconoclast migrate away from sentinel surface. The tooth sheds with some pulps tissue intact.

PRESSURE

Great pressure created by erupting permanent teeth to play a good role in resorption of milking teeth. For initiation of the resorption local pressure is necessary. Heavy mastication force, and muscular force is important for resorption of deciduous teeth.

Q,,4.. Explain the classification of tooth movement?

Answer..., it is classified into three stages.

1] PHYSIOLOGICAL TOOTH MOVEMENT

This movement is occurs naturally during and after tooth eruption. The movement consist of eruption, drift of teeth and changes in position of tooth in mastication.

2] ORTHODONTIC TOOTH MOVEMENT

This movement take part in area of pressure and tension around the tooth. Changes occurs according to the intensity of applied forces. On tension side root create pressure to disturb the periodontal ligaments. In direction of force periodontal ligaments has compressed force as it squeezed by movement of tooth to bone. On tension side PDL is stretched due to distance between alveolar process and tooth is wider as a result vascular increase. Due to force mobilization of fibroblasts and osteoblast occurs. Tearing of blood vessels occurs that leads to ischaemia.

3] PATHOLOGICAL TOOTH MOVEMENT

The movement of tooth occurs due to periodontal pathology and oral pathology like,,tumor and cysts. Mostly viruses can causes those diseases which are responsible for tooth movement.

PHASES

INITIAL PHASE

In this PHASE rapid movement take place, which represents the displacement of tooth in periodontal ligaments. Light and high force displace the tooth.

LAG PHASE

Very few movement or no movement take place. Formation of italicized occurs, and extends to 2 to 3 weeks.

POST LAG PHASE

Tooth movement start rapidly as hyalinized zone is removed and bone under go resorption.

More osteoblast formed.

Q,,5,, Elist the function and component of TMJ joint ?

Answer,,. FUNCTION OF TEMPOROMANDIBULAR JOINT

The production of movement by muscles of mastication is dominant function of temporomandibular joint. The upper part of temporomandibular joint permit protrusion and retraction of mandible and posterior and anterior movement of jaw. The lateral pterygoid muscles is act in protrusion and posterior fibers is responsible for retraction. The lower part of jaw permit elevation and depression of mandible. Elevation is caused by temporalsis, Lasseter and medial pterygoid muscles.

COMPONENT OF TEMPOROMANDIBULAR JOINT

- 1] FIBROUS CAPSULE,,. It is above to the anterior edge of preglenoid plane, posterior to squamous tympanic fissure, between these two edges of articular fossa. Below to periphery of neck of mandible.
- 2] ARTICULAR DISC,,. It is a fibrous cartilaginous in nature, having dividing joint cavity upper and lower component, its shape is oval.
- 3] LATERAL LIGAMENT OF JAW,,. It is connected with above the articular tubercle on the root of zygomatic process of temporal bone. It extends up and down with angle of 45 degree to horizontal attached with lateral surface.
- 4] SPHENOMANDIBULAR LIGAMENT,,,. Accessory ligament found in deep plane away from fibrous capsule. It adhered superiorly with spine of sphenoid and inferiorly with lingula of mandibular foramen.
- 5] STYLOMANDIBULAR LIGAMENT.,., It represents thickened of deep cervical fascia that separates PAROTID and submandibular salivary gland. It attached with lateral surface of the styloid process above and below to angle and post border of ramus of mandible.