Lecture 2

Dental Anatomy

Surfaces and Ridges

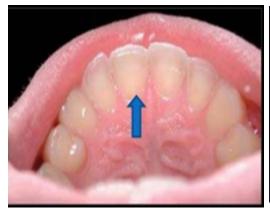
The crowns of the incisors and canines (Anterior teeth) have four surfaces and a ridge. The crowns of premolars and molars (posterior teeth) have five surfaces and the surfaces are named according to their positions and uses.

Surfaces of anterior teeth:

Labial surfaces: The surfaces of incisors and canines which are facing toward the lips.



Lingual surfaces: The surfaces which are facing toward the tongue.





Mesial surfaces: Those surfaces which are facing toward the midline.

Distal surfaces: Those surfaces which are away from the midline.

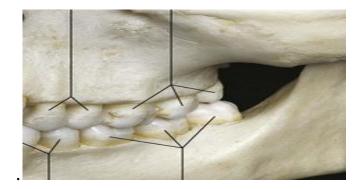


Incisal surface: The surfaces of the teeth which come in contact with those of opposite jaw during the act of closure cutting the food.



Surfaces of posterior teeth:

Buccal surfaces: Those surfaces of the premolars and molars which are facing toward the cheek.



Lingual surfaces: Those surfaces which are facing the tongue.

Mesial surfaces: Those surfaces which are facing the midline.

Distal surfaces: Those surfaces which are away from the midline.

Occlusal surfaces: The surfaces of the teeth which come in contact with those in the opposite.

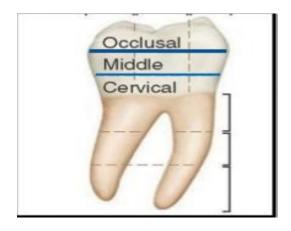


Proximal surface: surface (mesial, distal) which faces or lies adjacent to teeth in the same dental arch.

The Crown will be divided into three thirds:

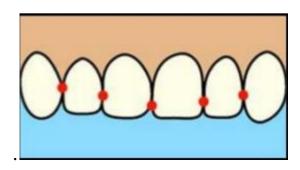
1-Incisal third: - Is that part of the tooth which is located between the incisal edge and middle third.

- 2-Middle third: that part of the tooth located between the incisal third and cervical third.
- *3-Cervical third*: -That part is located between the middle third and cervical line.



Contact area: area that formed when the mesial surface of the tooth contacts the distal surface of its neighbor by the same token, a distal surface of one tooth contact t mesial surface of another except for the distal surface of the last molar in both arches.

In posterior teeth are called the contact area while in anterior teeth are called the contact point

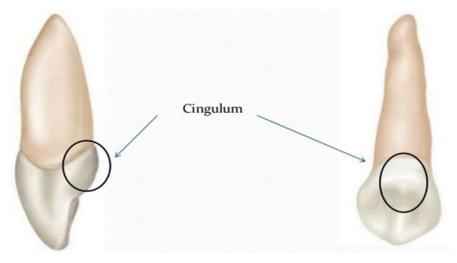


Functions of contact are:-

- 1-Prevent food force from going into the gum.
- 2- prevent trauma and pressure against the gingival.

ADDITIONAL TERMS:

A cingulum: is the lingual lobe of an anterior tooth. It makes up the bulk of the cervical third of the lingual surface.



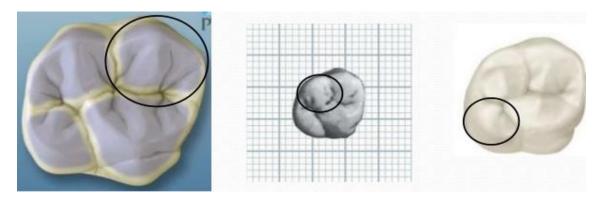
Lob: is a primary section of formation in the development of the crown.



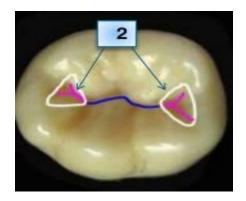
Incisal edge: is a term used to describe the edge which derived from the union of two flat surfaces.



Cusp: is an elevation on the crown that could be rounded or pointed it is present on the occlusal surface of premolars and molars and the incisal surface of canines, making up a divisional part of the occlusal surface.

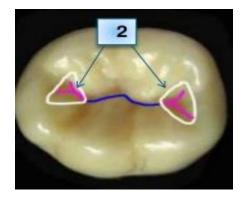


Fossa: an irregular, rounded depression or concavity found on the surface of a tooth. It is named according to its position.



Central fossa: a depression that is found upon the occlusal surface of molars and is formed by the converging of ridges terminating at a central point in the bottom of the depression where there is a junction of grooves.

Triangular fossa: it is located on the occlusal surface near the (mesial, distal) marginal ridge of posterior teeth and the lingual surface of anterior teeth.



Ridge is any liner, or elevation on the surface of a tooth and is named according to its location or form, (buccal ridge, incisal ridge, marginal ridge) so on.



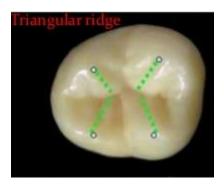
Incisal ridge: that portion of the crown that makes up the complete incisal surface.



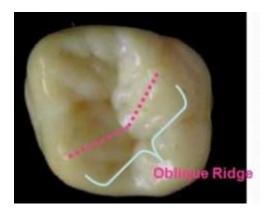
Marginal ridges: are those rounded borders of the enamel which form the margins of the occlusal surface of the premolar and molar mesially and distally and on the lingual surface of anterior teeth.



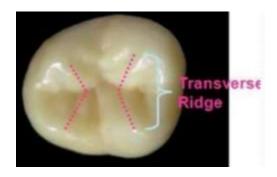
Triangular ridges: are those ridges that descend from the tips of the cusps of the molar and premolar toward the central part of the occlusal surfaces.



Oblique ridge: the ridge which is the union of two triangular ridges crossing obliquely the occlusal surface of the maxillary molar.



A transverse ridge is the union of two triangular ridges crossing transversally on the occlusal surface.



Developmental groove: a shallow groove or line on a tooth.



Supplemental groove: it lies distant shallow groove.



Pit: is a small pinpoint depression located at the junction of the groove.



Central pit: it is located in the center of the central fossa.

Mesial pit: is a pointed depression that is located distally to the mesial marginal ridge in the premolar and molars and it is the deepest point in the mesial triangular fossa.

The distal pit is located mesially to the distal marginal ridge in the distal triangular fossa where the developmental groove meets. In the premolars and molars.

GOOD LUCK