## The permanent canines

- The maxillary and mandibular canines are similar to each other . Each one is the third tooth from the median line , right or left .they are the longest teeth in the mouth, and the single roots are longer than those of any of the other teeth.
- In function , the canines support the incisors and premolars, since they are located between these groups .


## Permanent Maxillary Canine



Labial Aspect :The labial surface of the crown is smooth ,with no developmental lines except shallow depression mesially and distally, dividing the labial surface to three lobes. The middle lobe greater than others .This produces a ridge on the labial surface of the crown .

## Labial aspect

The cervical line labially is convex, toward the root portion .

## Labial aspect

- Mesial surface much flatter than the distal surface.
- Distal surface highly convex.



## Labial aspect

- Slight depression or concavity evident between the cervical line and the distal contact area .



## Labial aspect

- The mesial half of the crown makes contact with the lateral incisor, and the distal half contacts with the first premolar .so the contact areas are at different levels cervicoincisally .



## Labial aspect

- the mesial crest of curvature (contact area) is at the junction of the incisal and middle 1/3.
- Distal crest of curvature in the center of the middle 1/3.



## Labial aspect

- Mesio-incisal angle sharper than the disto-incisal angle .


## Labial aspect

- Slight saddlings evident mesial and distal to the cusp tip.
- The mesial slope shorter than distal slope.
- Labial height of contour in the gingival 1/3.


## Labial aspect

- Labial ridge prominent from cusp tip proceeding gingivally into the labial height of contour in the gingival 1/3.



## Labial aspect

The crown and root are narrower mesiodistally than those of the maxillary central incisor, about 1 mm .


## Labial aspect



- The root is usually the longest of any root with the possible exception of that the mandibular canine which may be as long at times.
- The root is conical in form with a blunty pointed apex .


## Labial aspect

- Cusp ridges may be flat following extensive incisal wear.

جَـامعة
Ten anatomical Typical specinheins

Labial aspect



Lingual Aspect :The crown and the root are narrower lingually than labially. The Cingulum is large and in some instances is pointed like a small cusp.

## Lingual aspect

- Shallow concavities are evident between the lingu ridge and the marginal ridges.
this concavities called mesial and distal fossae.



## Lingual aspect

جَــامعة الـَمَـنارة

- Lingual of crown and root are narrower from lingual than the labial aspect.
- Because of this formation, much of the mesial and distal surface of the root is visible from the lingual aspect



## maxillary Canine, $\underset{\substack{\text { ditition } \\ \text { dition }}}{ }$ general landmarks



## maxillary Canine , wimgeneral landmarks حَـامعة الْـَــنارة <br> meralanemetioty



## Lingual aspect

- The Cingulum is large and in some instances is pointed like a small cusp.


## Lingual aspect

- Marginal ridges well developed



## Lingual aspect

- mesial and distal fossae are present separated by the lingual ridge which fades out as it nears the cingulum.



## Lingual aspect

- Cusp tip centered approximately on the long axis of the tooth.


## Lingual aspect

- Distal cusp ridge longer than the mesial cusp ridge due to the position of the distal height of contour in the middle 1/3.



## Lingual aspect

- Saddlings on the cusp ridges are seen from this view.



## Lingual aspect

- Mesial crest of curvature at the junction of the incisal and middle 1/3.



## Lingual aspect

- Cusp ridge saddlings apparent.



Mesial Aspect: The outline of the crown is wedge- shaped.the mesial surface of the crown presents convexities at all points except for a small area above the contact area where the surface is concave and flat. The root appears broad with a shallow developmental depression for part of the root length.

## Mesial aspect

- the mesial surface of the crown presents convexities at all points except for a small area above the contact area where the surface is concave and flat.



## Mesial aspect

- The outline of the crown is wedge- shaped.
- Labial and lingual heights of contour in the gingival 1/3.



## Mesial aspect

- Mesial height of contour at the junction of the incisal and middle 1/3.



## Mesial aspect

- Mesial cemento-enamel line has slightly greater curvature toward the incisal than th distal cemento-enamel line.

Ten anatomical Typical spexetithens

Mesial aspect


## Distal aspect

- It shows somewhat the same form as the mesial aspect. However
- the distal marginal ridge is heavier and more irregular in outline.



## Distal aspect

جَــامعة
النَمـنارة

- The developmental depression on the distal side of the root is more pronounced.


## Distal aspect

- Cemento-enamel line flatter than the line on the mesial surface, and positioned slightly apical to the mesial cemento-enamel line.



## Distal aspect

جَــامعة الْمَــنارة

- Cusp tip is centered over the long axis of the tooth.



## Distal aspect

- Labial and lingual heights of contour are in the gingival $1 / 3$.

Distal aspect
الْـَــامعارة


## Incisal aspect

- Mesio- and distolingual fossa usually well developed bounded on the proximal by well developed marginal ridges.



## Incisal aspect

- Labial surface highly convex.



Incisal Aspect :The ridge of the middle labial lobe is very noticeable labially from this aspect .It attains its greatest convexity at the cervical third of the crown .The cingulum development makes up the cervical third of the crown lingually

## Incisal aspect

- Cusp tip centered mesiodistally and labiolingually.



## Incisal aspect

- The cingulum development makes up the cervical third of the crown lingually



## Incisal aspect

- Marginal ridges prominent on the lingual surface.
- Labial ridge evident in the center of the labial surface.



## Incisal aspect

- Mesiolabial and distolabial developmental depressions often well developed .



## Incisal aspect

- Lingual ridge may be prominent near the cusp tip, then fades out as it approaches the middle $1 / 3$ of the lingual surface.


## Incisal aspect

- Labial developmental depressions typically are seen.
- Mesial $1 / 2$ of the crown is wider labiolingually than the distal. $1 / 2$


## Incisal aspect

- Lingual surface may have small pits and grooves.


## Incisal aspect



Ten anatomical Typical speisimens الــــنارة


## Uncommon anatomical vardations

1 - Crown very long with extreme curvature at the apical third of the root.

2 - Entire tooth unusually long ,note the hypercementosis at root end.

3 - very short crown ,root small and malformed.


## Uncommon anatomicatadaiations

4 - Mesiodistal dimension of crown at contact are extreme ,calibration at cervix narrow in comparison ;root short for crown of this size .

5 - Extreme labiolingually calibration, root with unusual curvature


## Uncommon anatomical vairiations

6 - Tooth malformed generally.

7 - Large crown, short root .

8 -Root overdeveloped , and very blunt at the apex.


## Uncommon anatomicabdariations

## 9-Odd curvature of root.

10-Crown poorly formed ,root extra long.

11-Crown poorly formed ,root extra long.


