

# The permanent Maxillary Lateral Incisor

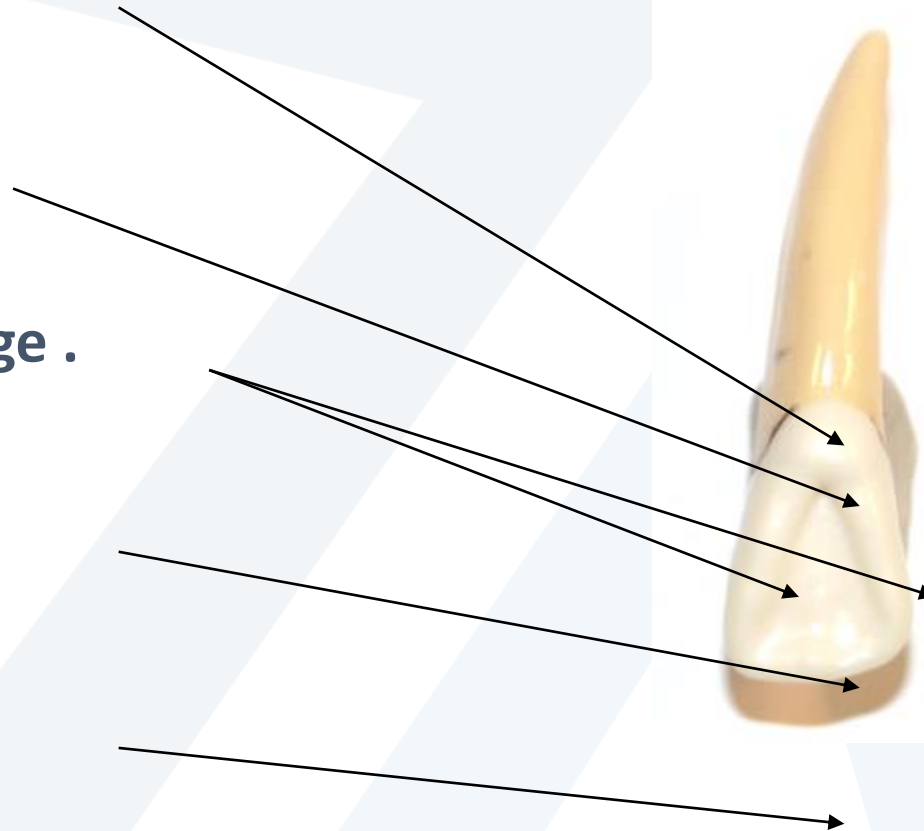
**It is smaller than the maxillary central incisor in all dimensions except the length of the root . Usually as long , if not : longer , than that of the maxillary central incisor .**

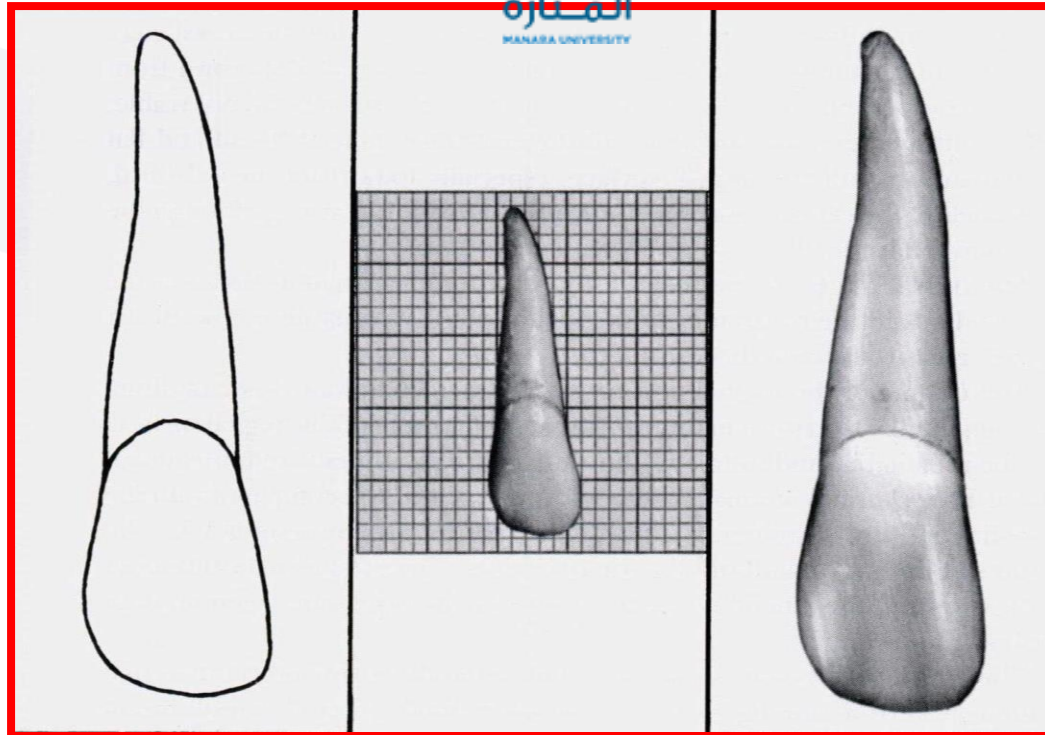
**تبزغ في عمر 8-9 سنوات**

**Maxillary lateral incisors vary in form more than any other tooth in the mouth except the third molar .**

# Landmarks on maxillary lateral Incisor

- CL: Cervical Line.
- Cl: Cingulum.
- MR: Marginal Ridge .
- LF: Lingual Fossa.
- IR: Incisal Ridge .





**Labial Aspect:** It has more curvature with a rounded incisal ridge and rounded incisal angles mesially and distally than central incisor . Although the crown is smaller than the central incisor in all dimensions. In most cases , the root curves distally ,and ends **in a pointed apex** , some roots are straight .

## Labial aspect

- **Labial height of contour** is prominent and located in the gingival 1/3.
- Distal surface is usually more “round” than the flatter mesial surface .
- There is much variation in shape of this tooth from this view .



## Labial aspect

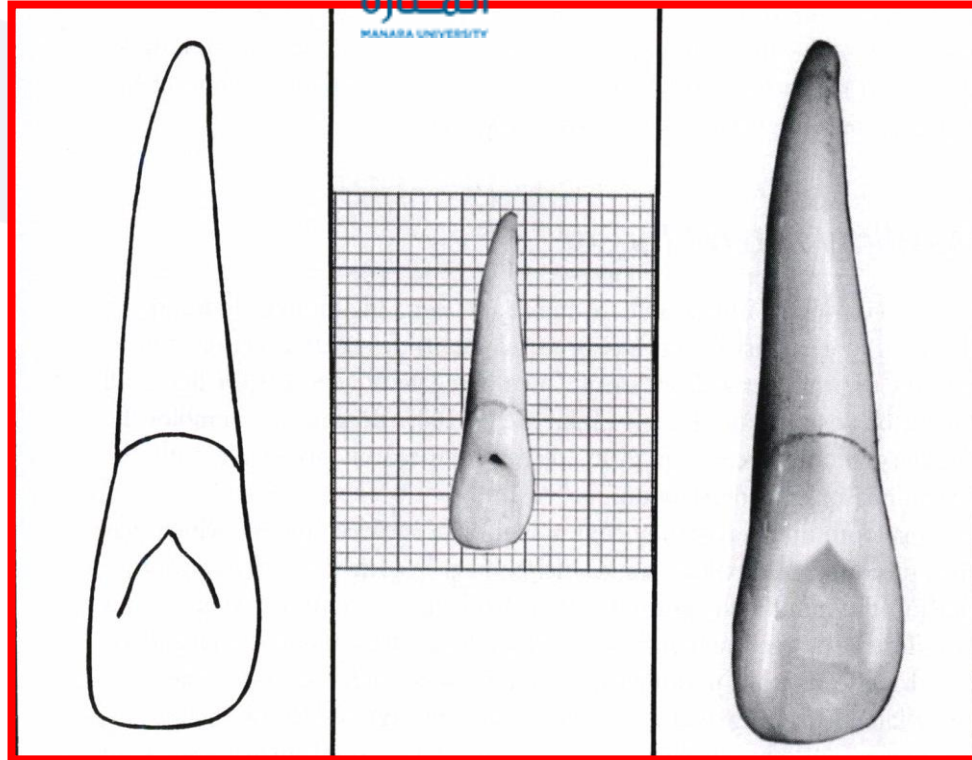
- Some lateral incisors have such a rounded appearance as to be almost tear-drop shaped .
- In some individuals , the lateral incisors are missing entirely .



## Labial aspect

- Crown shorter incisogingivally than the central incisor, usually 2-3-mm , and its angles are more rounded .This tooth narrower mesiodistally than central .



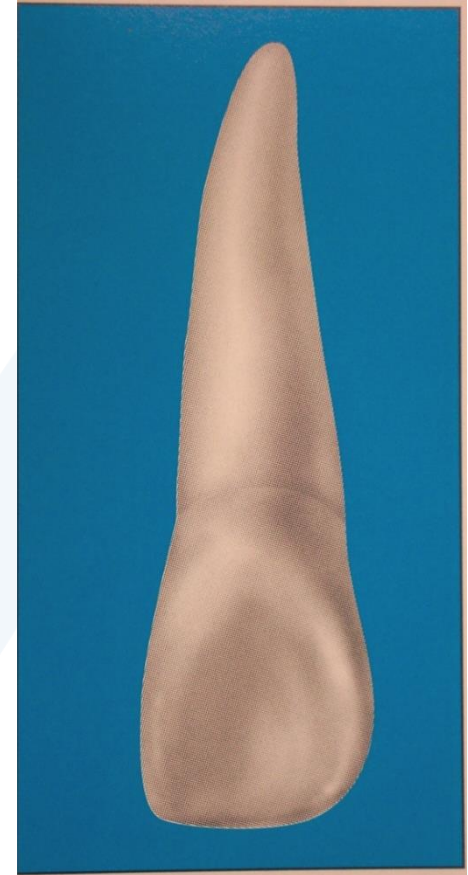


**Lingual Aspect:** Mesial and distal marginal ridges are marked ,and the cingulum is usually prominent,with tendency toward deep developmental grooves within the lingual fossa ,where it join the cingulum .

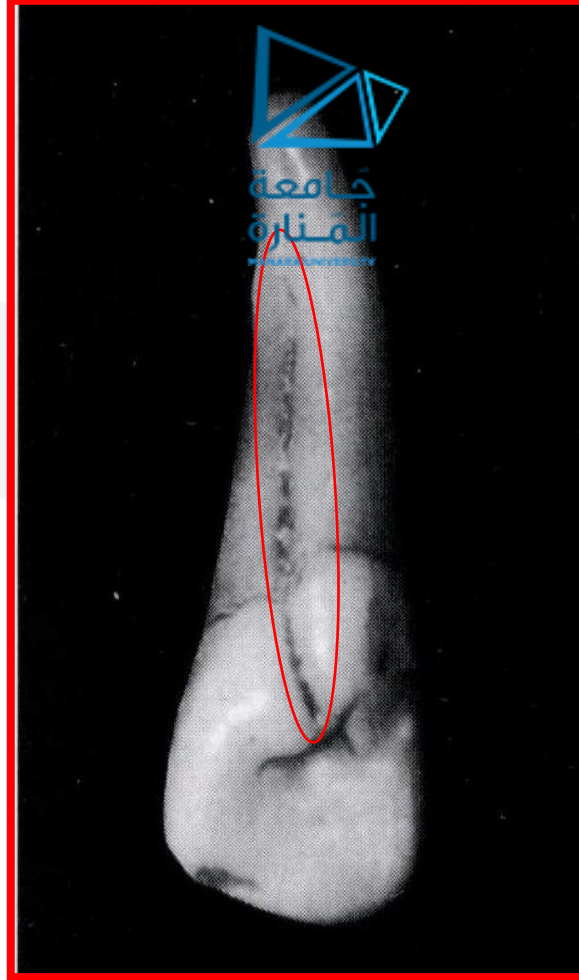


# Palatal aspect

- Distinctive deep lingual fossa with linguogingival groove or **lingual pit** often present .



**It is not uncommon to find a deep developmental groove at the side of the cingulum , usually on the distal side , which may extended up on the root for part or all of its length .**



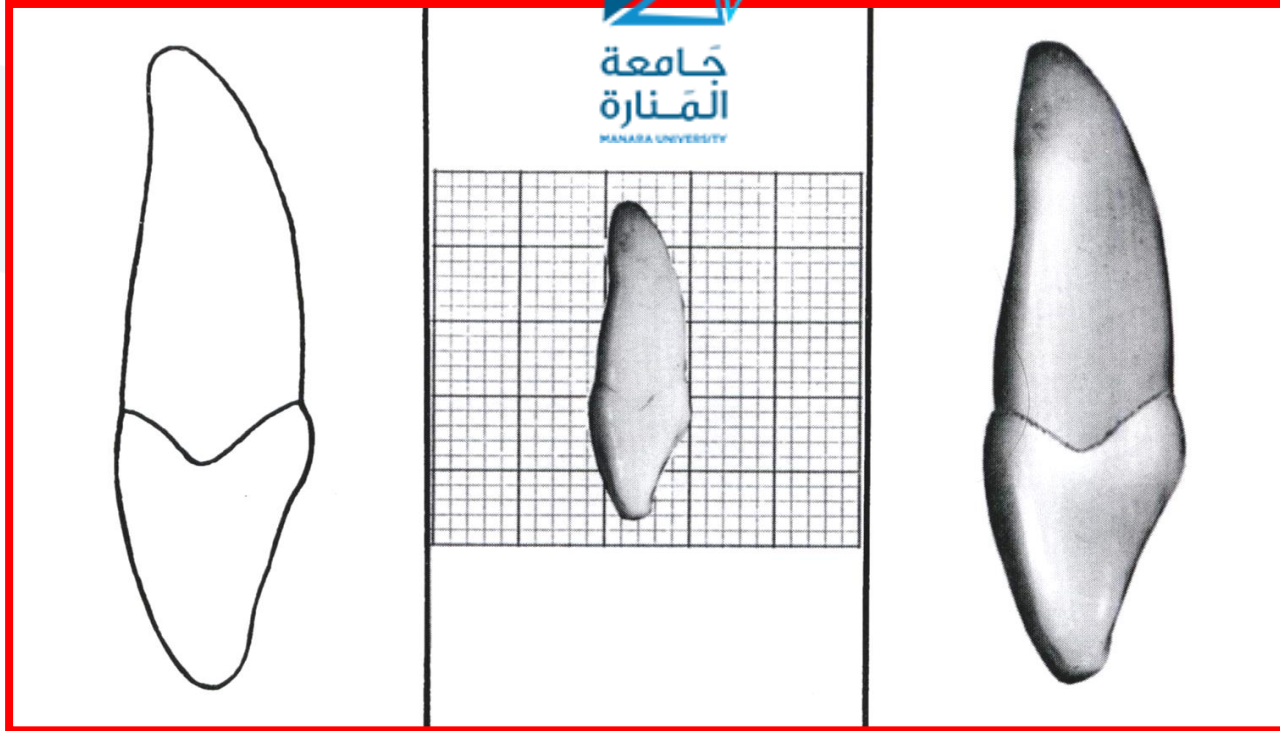
(Palto-radicular) groove

Incomplete formation demonstrated by a **developmental groove** distolingually on maxillary Lateral incisor (**Palto-radicular) groove** .

A tooth with a handicap is more subject to caries.



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**Mesial aspect :** The mesial aspect is similar to that of a small central incisor, but the crown is shorter ,and the root is relatively longer .The root appears as a tapered cone ,with ablutly rounded apex. .

# Mesial aspect

- A line drawn through the center of the root bisects the incisal ridge of the crown .



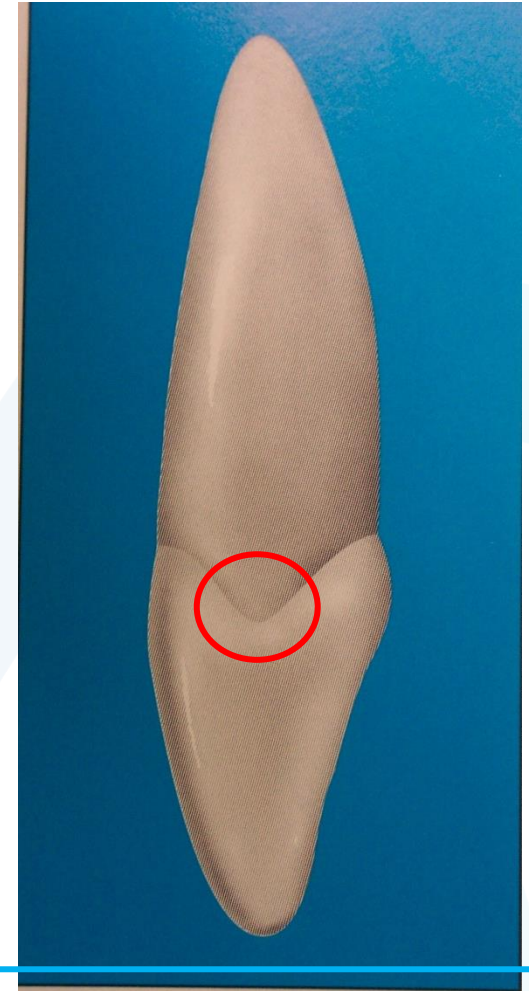
# Mesial aspect

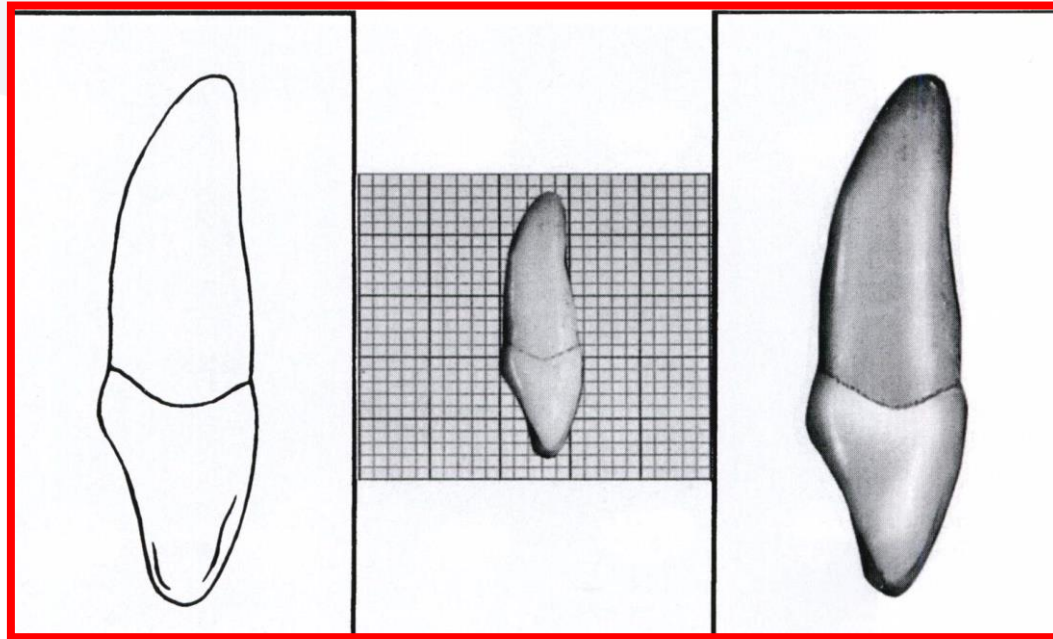
- Well developed marginal ridges meet at the cingulum in a rounded V-shape .



# Mesial aspect

- the depth of curvature of the cervical line in mesial surface is greater towards the incisal ridge than the distal cervical line curvature .





**Distal Aspect :** The width of the crown distally appears thicker than it does mesially from marginal ridge to labial face. The curvature of the cervical line is usually a millimeter or less in depth than on the mesial side.



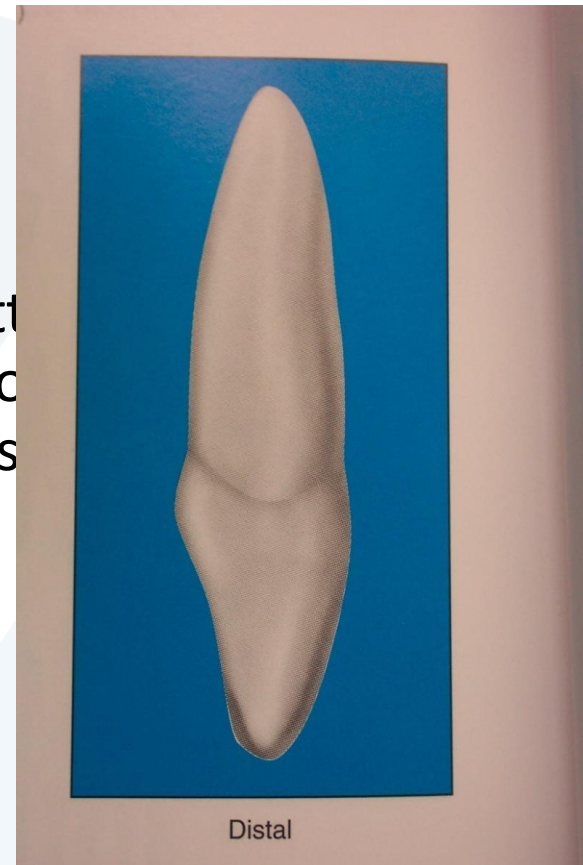
# Distal aspect

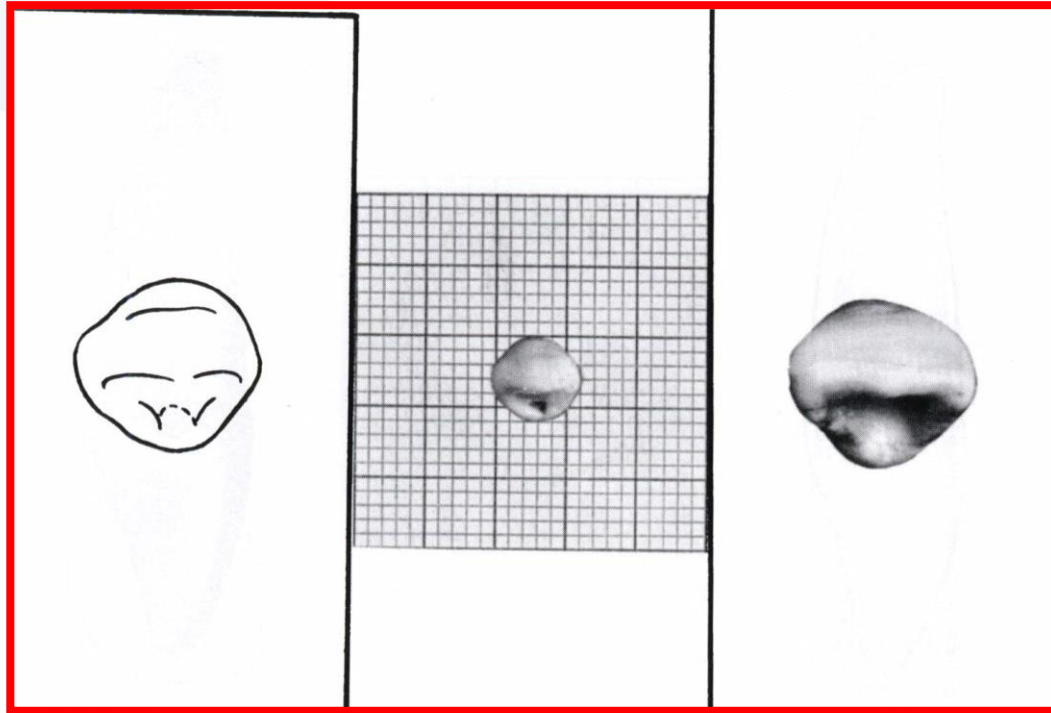
- Incisal ridge is centered over the long axis of the tooth .



# Distal aspect

- The contour of the cervical line is flatter than that on the mesial, and therefore positioned slightly apical to the mesial cervical line.





**Incisal Aspect** The incisal aspect of this tooth sometimes resembles that of the central incisor ,or it may resemble that of a small canine .

**All maxillary lateral incisors exhibit more convexity labially and lingually from the incisal aspect than maxillary central incisors .**

# Incisal aspect

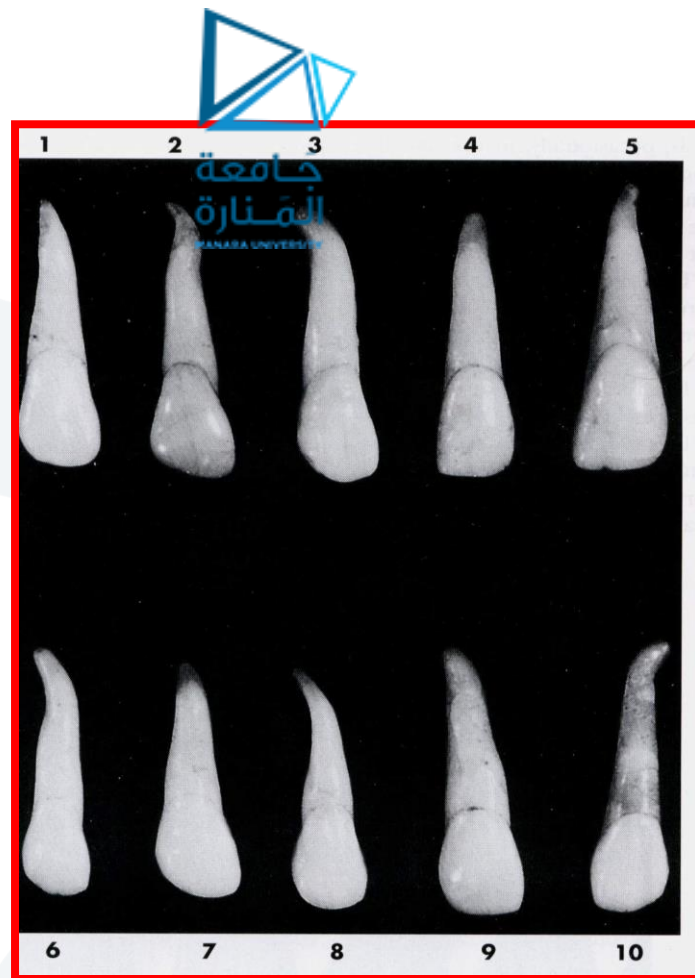
- Marginal ridges are well developed and tend to meet at the cingulum in a V-shape.



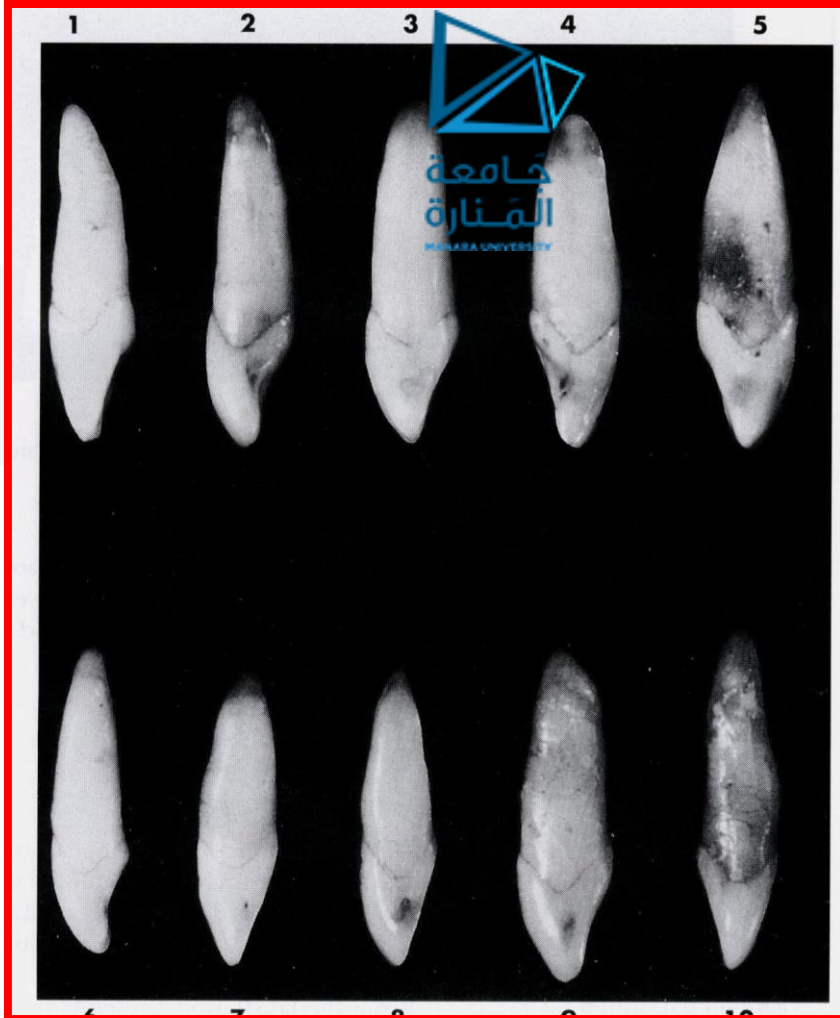
# Incisal aspect

- This tooth is more convex than its central incisor neighbor .
- Labial contour is a full convexity, both incisogingivally and mesiodistally.
- Lingual fossa depth highlighted with a lingual pit.





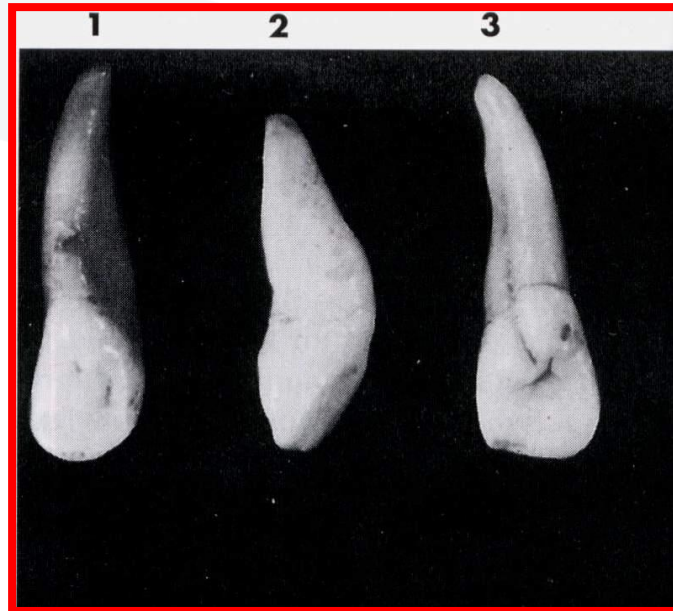
**Labial aspect ,Ten Typical specimens of the maxillary lateral incisor .**



**Mesial aspect ,Ten Typical specimens of the maxillary lateral incisor .**



## Maxillary lateral incisor : specimens with uncommon variations



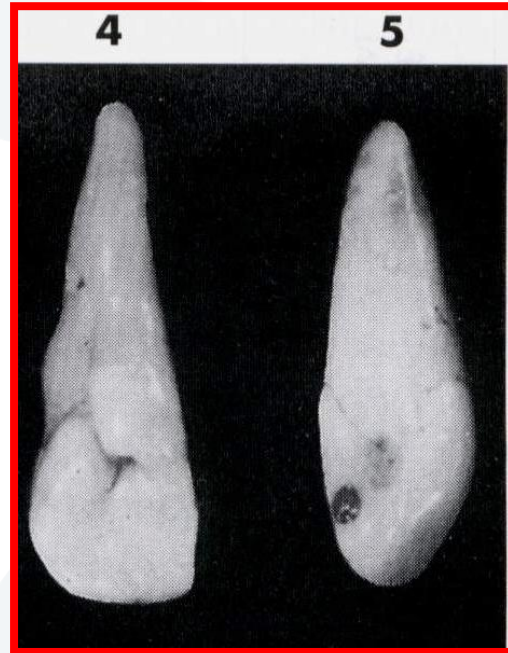
**1-Odd twist to crown and root.**

**2-malformed generally.**

**3-Deep developmental (Palto-radicular) groove distally ,note pit in lingual fossa.**



## Maxillary lateral incisor : specimens with uncommon variations



**4-Same as specimen 3 with pit and groove connected.**

**5-Deep concavity above contact area of the crown.**

# Maxillary lateral incisor : specimens with uncommon variations



**6-Abnormally large but well formed.**

**7-A common situation is to find maxillary lateral with a nondescript , pointed form , such teeth are called peg-shaped laterals .**

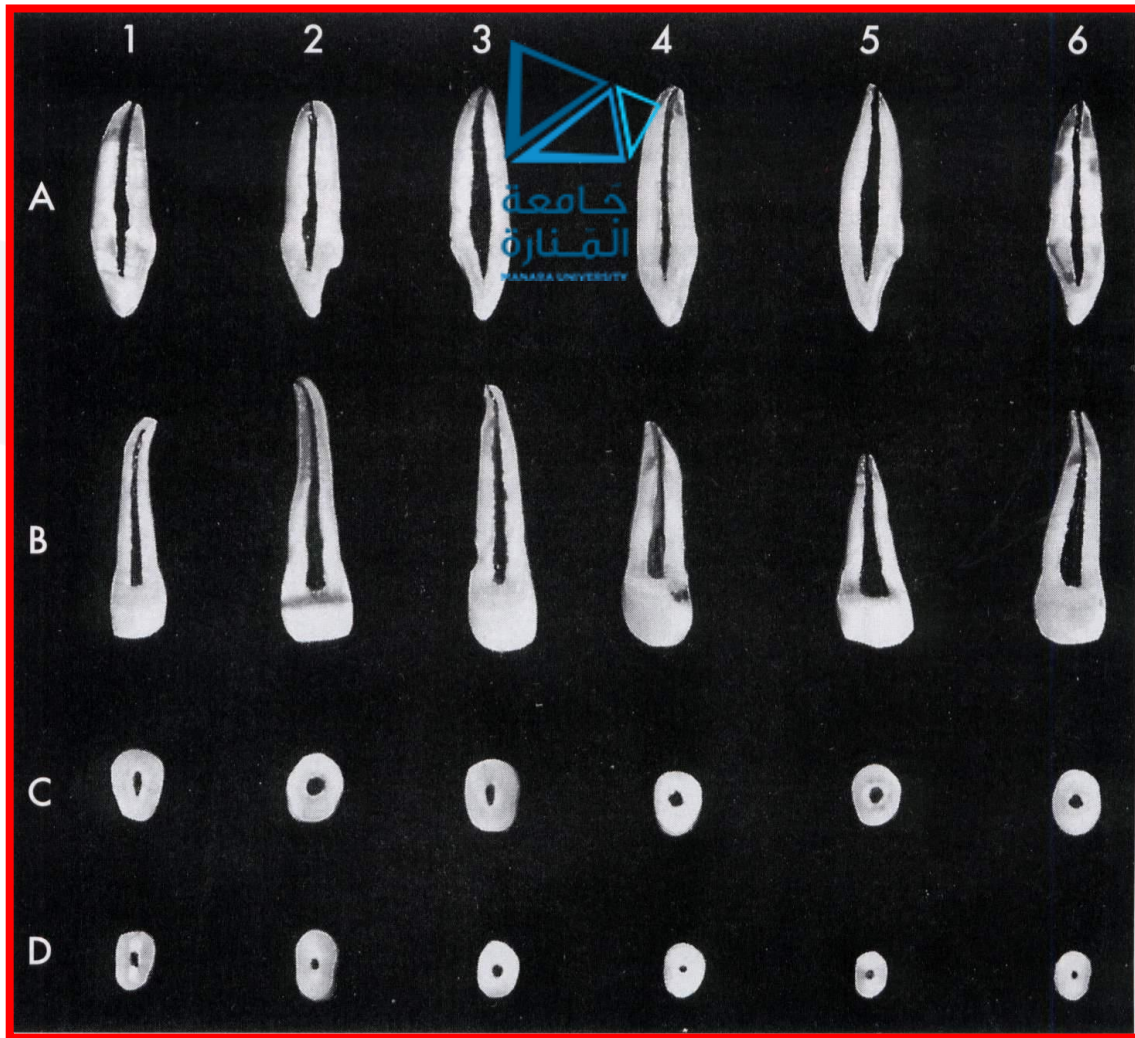
**( Single-cusp developmental and malformed root called peg lateral incisor ).**

**8-same as specimen 7 ,except root is straight.**

## Maxillary lateral incisor : specimens with uncommon variations



- 9- Same as specimen 5, with deep lingual pit in addition.
- 10- Resemblance to a small maxillary central incisor more marked than the average.



**Maxillary lateral incisor-Sections of natural specimens:**  
**A,1 to 6: Labiolingual sections.**  
**B,1 to 6 :Mesiodistal sections.**  
**C, 1 to 6 :Cervical cross sections of root .D, 1 to 6:Midroot cross sections.**