

Maxillary Lateral Incisor

Because the maxillary lateral incisor supplements the central incisor in function, the crowns bear a close resemblance. The lateral incisor is smaller in all dimensions except root length.

This tooth differs from the central incisor in its development, which may vary considerably. Maxillary lateral incisors vary in form more than any other tooth in the mouth except the third molar. If the variation is too great, it is considered a developmental anomaly.

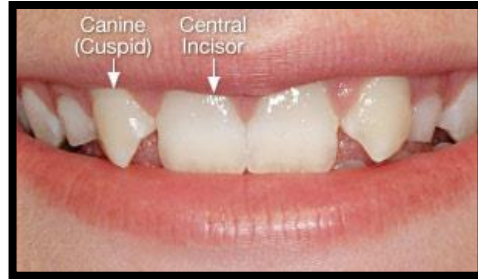
A common situation is to find maxillary lateral incisors with a nondescript, pointed form; such teeth are called peg-shaped laterals.



In some individuals, the lateral incisors are missing entirely; in these cases, the maxillary central incisor may be in contact distally with the canine.

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The presence of a palate-gingival groove in maxillary incisors may be a predisposing factor in localized periodontal disease. This groove is also referred to as the palate-radicular groove.



One type of malformed maxillary lateral incisor has a large, pointed tubercle as part of the cingulum.

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some have deep developmental grooves that extend down on the root lingually with a deep fold in the cingulum; and some show twisted roots, distorted crowns, and so on.



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DETAILED DESCRIPTION OF THE MAXILLARY LATERAL INCISOR FROM ALL ASPECTS

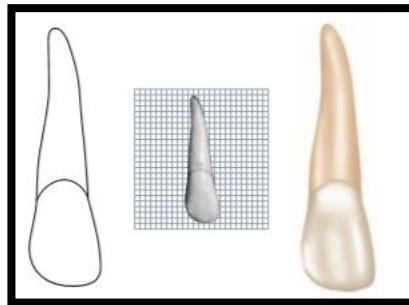
Labial Aspect

1. Although the labial aspect of the maxillary lateral incisor may appear to favor that of the central incisor, usually it has more curvature, with a rounded incisal ridge and rounded incisal angles mesially and distally.
2. Although the crown is smaller in all dimensions, its proportions usually correspond to those of the central incisor.
3. The mesial outline of the crown from the labial aspect resembles that of the central incisor, with a more rounded mesio-incisal angle. The crest of contour mesially is usually at the point of junction of the middle and incisal thirds; the mesio-incisal angle is almost as sharp as that found on most maxillary central incisors. However, a more rounded mesio-incisal angle is seen more often.
4. The distal outline of the crown from the labial aspect differs somewhat from that of the central incisor. The distal outline is always more rounded, and the crest of contour is more cervical, usually in the center of the middle third. Some forms describe a semicircular outline distally from the cervix to the center of the incisal ridge.
5. The labial surface of the crown is more convex than that of the central incisor except in some square and flat-faced forms.

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- This tooth is relatively narrow mesio-distally, usually about 2 mm narrower than the central incisor.
- The crown on the average measures from 2 to 3 mm shorter cervico-incisally than that of the central incisor, although the root is usually as long, if not somewhat longer, than that of the central incisor. In general, its root length is greater in proportion to its crown length than that of the central incisor. The root is often about 1.5 times the length of the crown.
- The root tapers evenly from the cervical line to a point approximately two thirds of its length apically. In most cases, it curves sharply from this location in a distal direction and ends in a pointed apex. Although the curvature distally is typical, some roots are straight, and some may be found curving mesially.



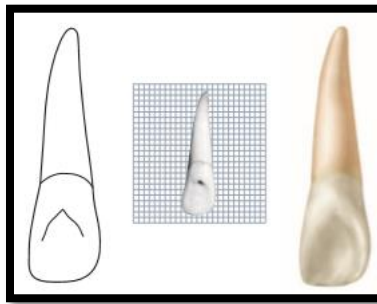
Lingual Aspect

- From the lingual aspect, mesial and distal marginal ridges are marked, and the cingulum is usually prominent, with a tendency toward deep developmental grooves within the lingual fossa, where it joins the cingulum.

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- The linguo-incisal ridge is well developed, and the lingual fossa is more concave and circumscribed than that found on the central incisor. The tooth tapers toward the lingual, resembling a central incisor in this respect.
- It is not uncommon to find a deep developmental groove at the side of the cingulum, usually on the distal side, which may extend up on the root for part or all of its length.



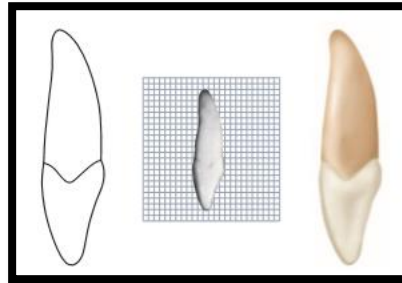
Mesial Aspect

- The mesial aspect of the maxillary lateral incisor is similar to that of central incisor except that the root appears longer.
- The labiolingual measurement of the crown and root is a millimeter or so less than that of the maxillary central incisor of the same mouth.
- The curvature of the cervical line is marked in the direction of the incisal ridge, although because of the small size of the crown the actual extent of curvature is less than that found on the central incisor.

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- The heavy development of the incisal ridge accordingly makes the incisal portion appear somewhat thicker than that of the central incisor.
- The root appears as a tapered cone from this aspect, with a bluntly rounded apical end. This varies in individuals, with the apical end sometimes being quite blunt, while at other times, it is pointed.
- The labial outline of the root from this aspect is straight. As in the central incisor, a line drawn through the center of the root tends to bisect the incisal ridge of the crown.



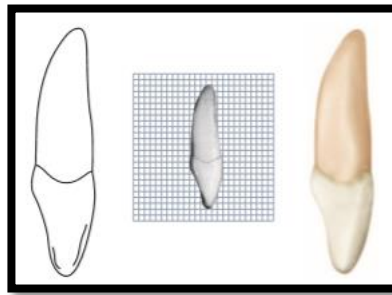
Distal Aspect

- The width of the crown distally appears thicker than it does on the mesial aspect from marginal ridge to labial face Because of the placement of the crown on the root.
- The curvature of the cervical line is usually a millimeter or so less in depth than on the mesial side.

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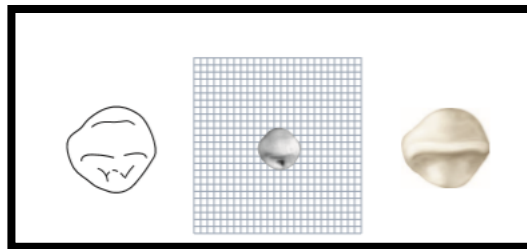
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- It is not uncommon to find a developmental groove distally on this crown extending on the root for part or all of its length.



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 do the maxillary central incisors.





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Tooth aspect	Maxillary central incisor	Maxillary lateral incisor
General description	<ol style="list-style-type: none"> 1. No developmental anomaly 	<ol style="list-style-type: none"> 1. Maxillary lateral incisors vary in form (developmental anomaly) more than any other tooth in the mouth except the third molar such as: <ul style="list-style-type: none"> *A common situation is to find maxillary lateral incisors with a nondescript, pointed form; such teeth are called peg-shaped laterals. * In some individuals, the lateral incisors are missing entirely.
Labial aspect	<ol style="list-style-type: none"> 1. The crown is longer and wider mesio-distally. 2. Mesial outline is slightly convex with a crest of curvature near the mesio-incisal angle. 3. Distal outline is more convex than mesial out line with the 	<ol style="list-style-type: none"> 1. The crown is shorter and narrower. 2. Mesial outline is similar to maxillary central incisor with acute and more rounded mesio-incisal angle with the crest of curvature at the junction between middle and incisal thirds. 3. Distal outline is more rounded and the crest of curvature is at the center of the middle third.



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	<p>crest of curvature closer to middle thirds.</p> <p>4. The root is shorter with a cone shaped and blunt apex.</p>	<p>4. The root is longer than maxillary central incisor, tapers evenly and curves distally in a pointed apex.</p>
Mesial aspect	<ul style="list-style-type: none"> The crown is wider labiolingually with a pronounced curvature of the cervical line. 	<ul style="list-style-type: none"> The crown is narrower labiolingually with the curvature of the cervical line less pronounced.
Distal aspect	<ul style="list-style-type: none"> No developmental groove extending to the root. 	<ul style="list-style-type: none"> A developmental groove extending from the side of the cingulum to the root may be found.
Lingual aspect	<ul style="list-style-type: none"> Well defined lingual anatomical features (mesial & distal marginal ridges, lingual fossa, cingulum, lingual side of the incisal ridge) 	<ul style="list-style-type: none"> More prominent cingulum with a more concave lingual fossa.