
Mandibular Incisors
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1


Incisors
Tooth size:
• MD width: Md incisor < Mx Incisor
• Lower lateral > central
• Mandibular central incisor is the smallest anterior tooth.

2

Mandibular central incisors

ฟันตัดแท้ล่างซี่กลาง

- Evidence of calcification 3-4 months
- Eruption 6-7 years
- Root completed 9 years
- Crown length 9 mm
- Root length 12.5 mm
- The smallest & least variable tooth.
- Mesial half and distal half are alike.



3

- ✓ Both MI and DI angles are sharp and at right angle
- ✓ Symmetrical crown outline



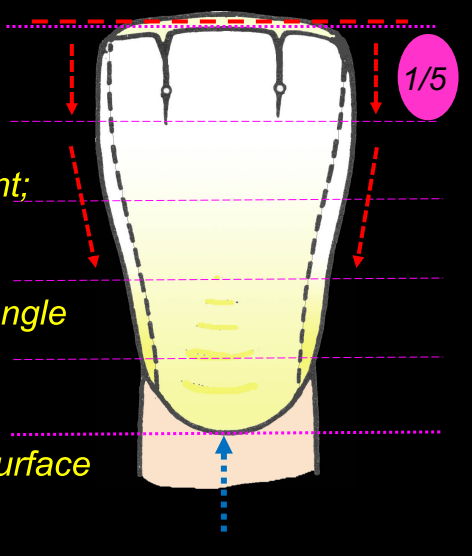
Both mesioincisal and distoincisal angles are sharp

Labial aspect

5

Labial surface

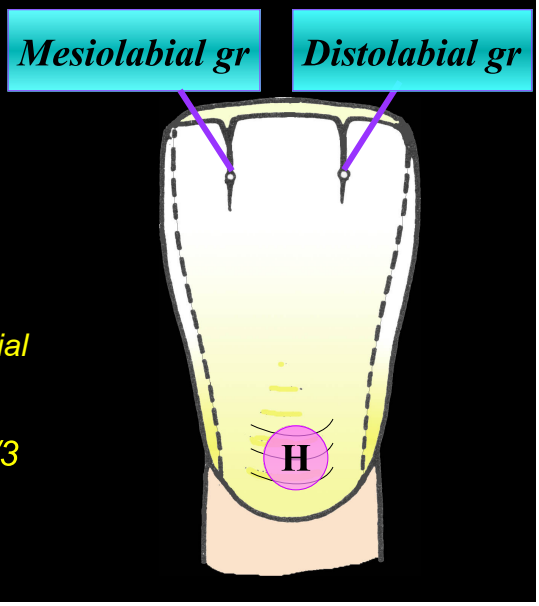
- Incisal border : mamelon,
  >>> straight border
- M&D border : inc 1/5 straight;
  slightly tapered cervically
- M-Inc & D-Inc angle: right angle
- C border : curve @ middle
- Relatively flat, smooth La surface



6

Labial surface

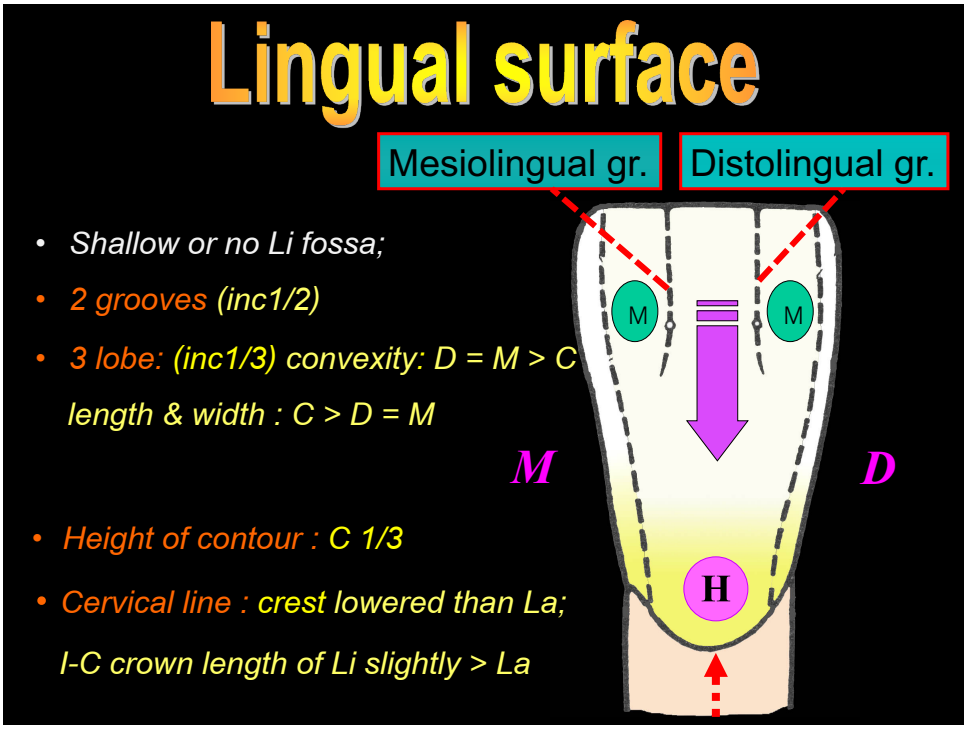
- 3 lobes
  - wideness: C > D = M
  - Length: C > D = M
  - convexity: C > D = M
- 2 grooves
  - Mesiolabial & Distolabial
  - incisal 1/3
- Height of contour : C 1/3



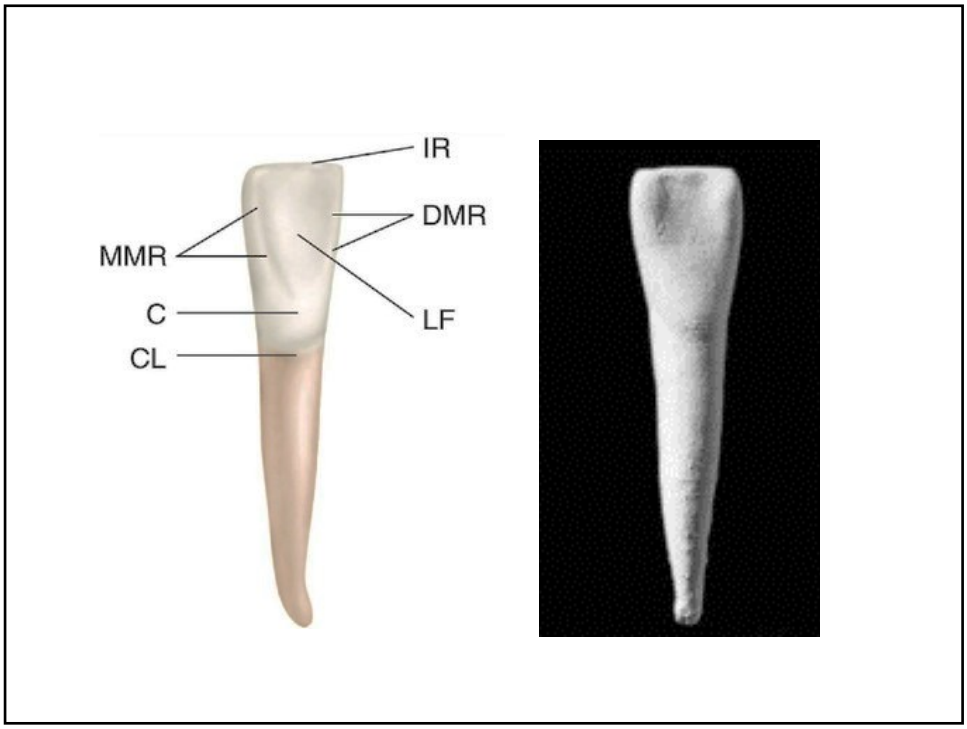
7


Shallow Li fossa / no fossa.
Marginal ridge & cingulum less prominent.

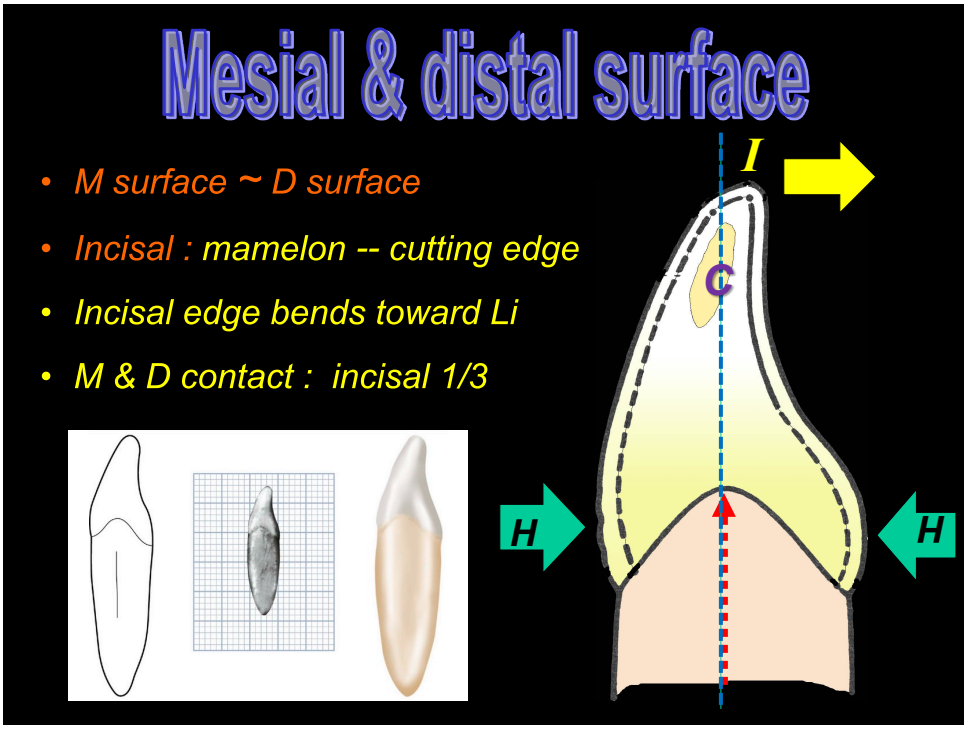
8


Lingual surface
Mesiolingual gr.
Distolingual gr.
• Shallow or no Li fossa;
• 2 grooves (inc1/2)
• 3 lobe: (inc1/3) convexity: D = M > C
length & width : C > D = M
M
D
• Height of contour : C 1/3
• Cervical line : crest lowered than La;
I-C crown length of Li slightly > La
M
M
H

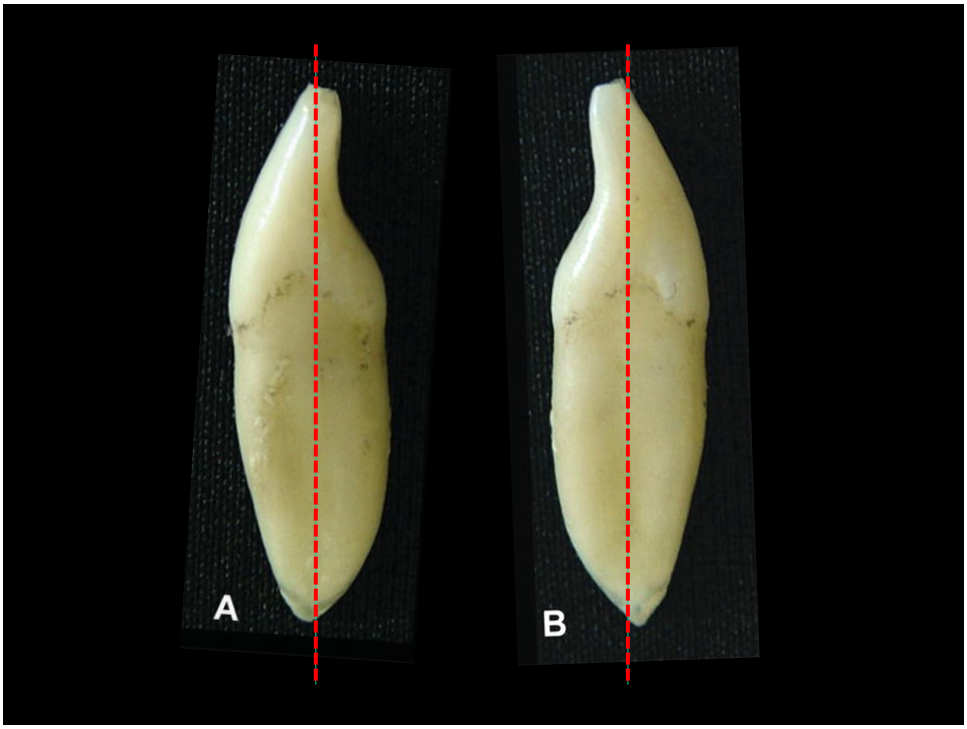
10


IR
DMR
MMR
C
LF
CL

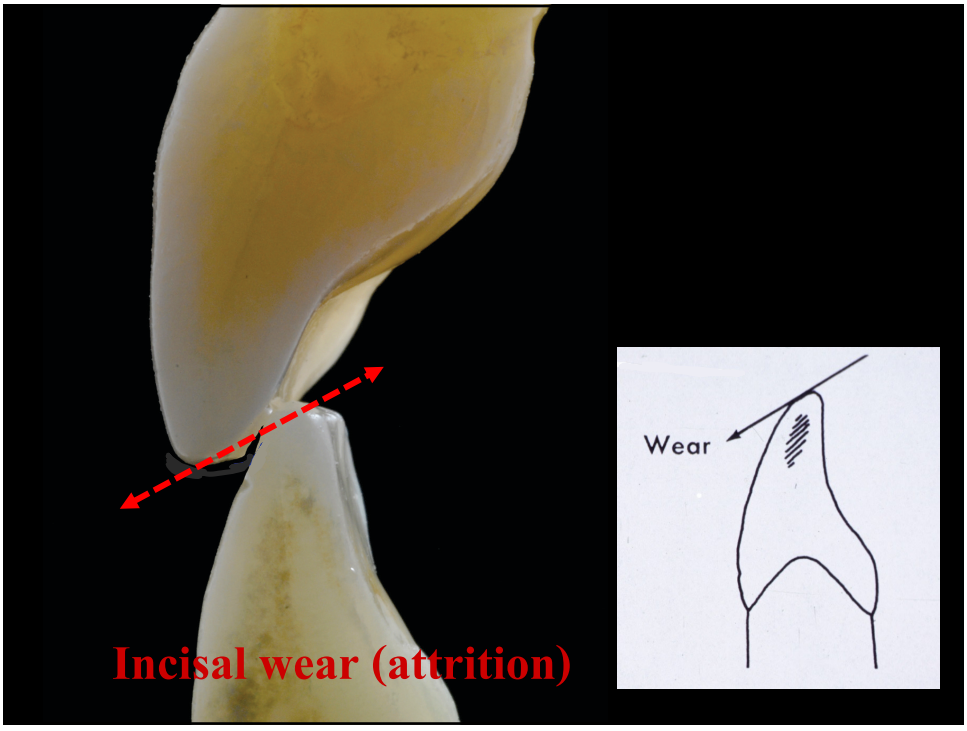
11


Mesial & distal surface
M surface ~ D surface
Incisal : mamelon -- cutting edge
Incisal edge bends toward Li
M & D contact : incisal 1/3
I
C
H
H

12



13



14



15

Incisal surface

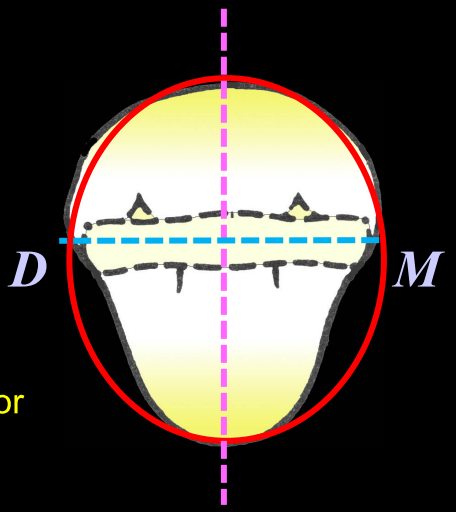
Outline : ovoid

- *Symmetrical outline*

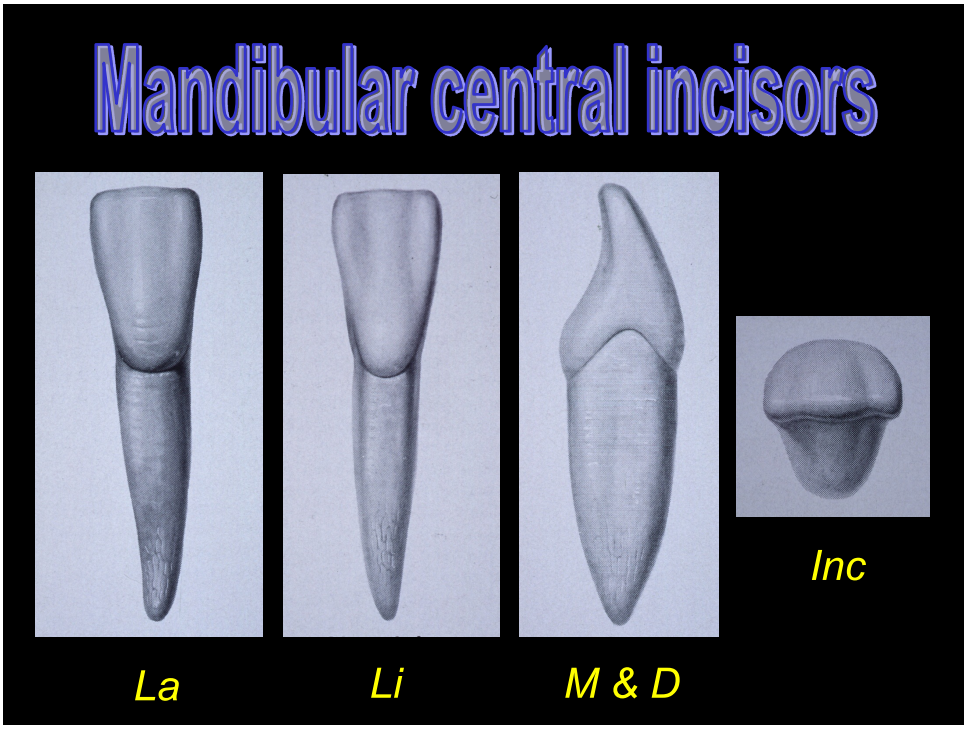
Incisal surface: straight and

⊾ to the bisecting line

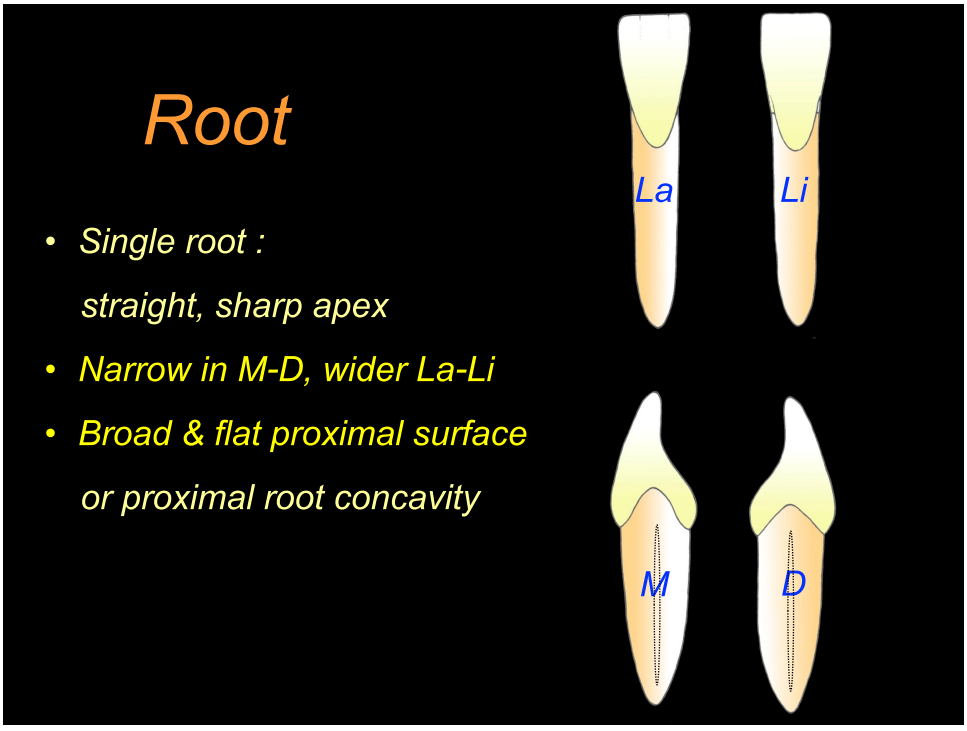
Cingulum: usually centered or very slightly off to D



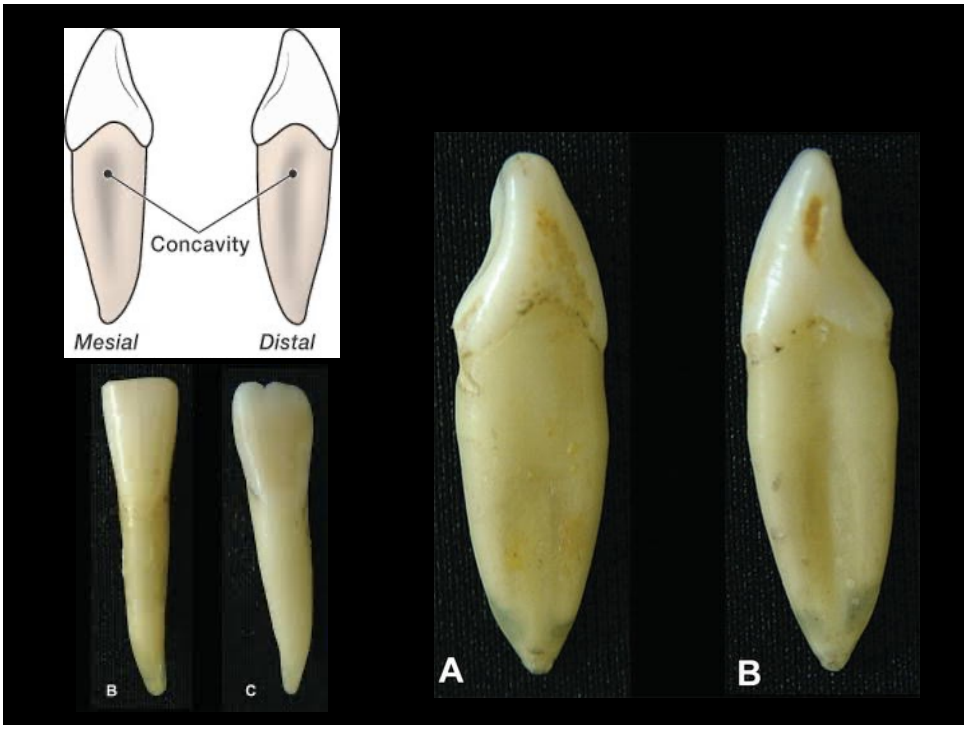
16


Mandibular central incisors
La
Li
M & D
Inc

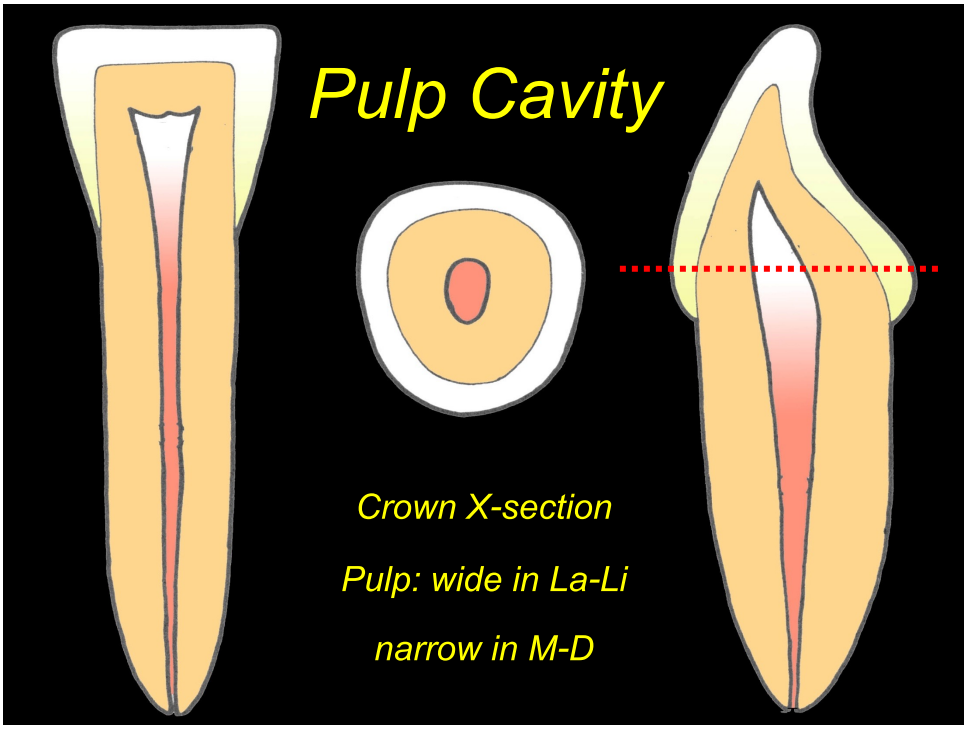
17


Root
Single root :
straight, sharp apex
Narrow in M-D, wider La-Li
Broad & flat proximal surface
or proximal root concavity
La
Li
M
D

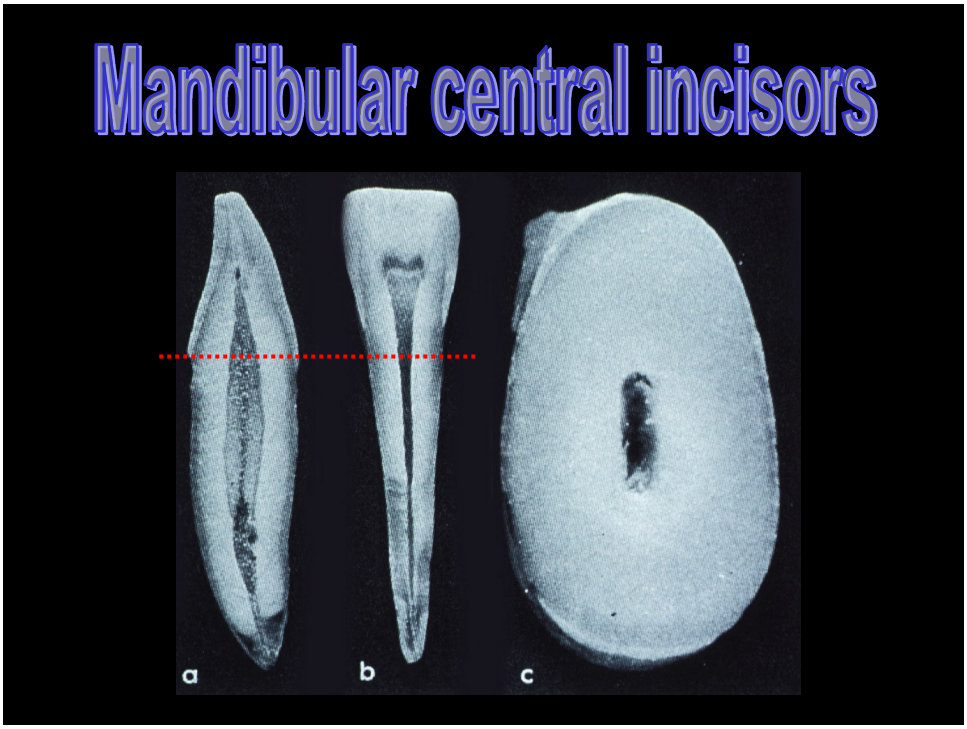
18


Concavity
Mesial
Distal
B
C
A
B

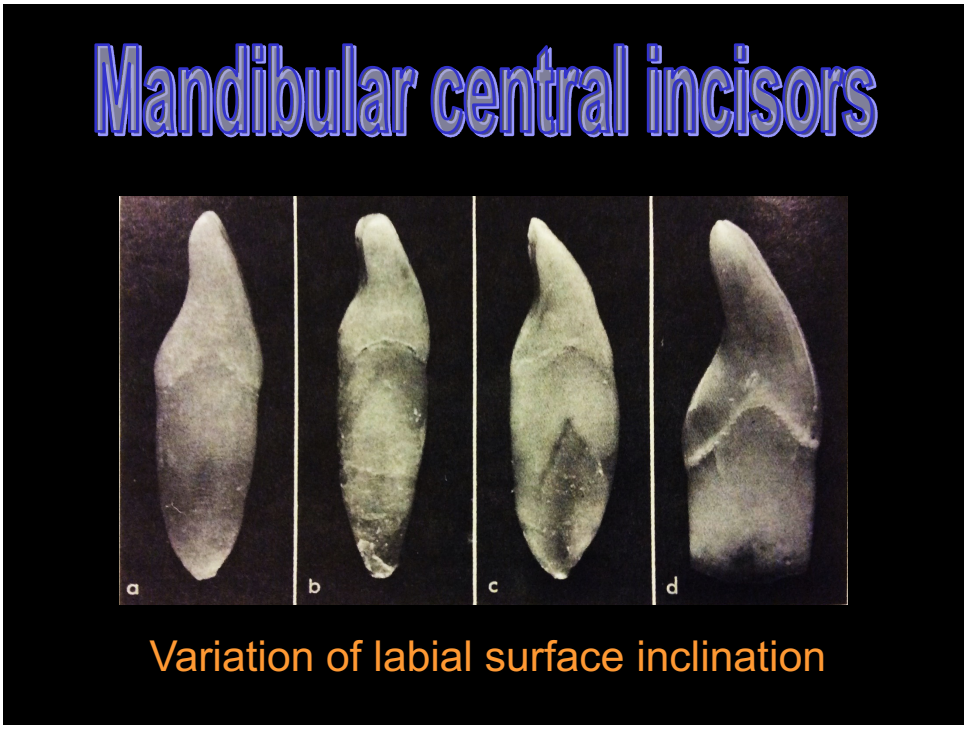
19


Pulp Cavity
Crown X-section
Pulp: wide in La-Li
narrow in M-D

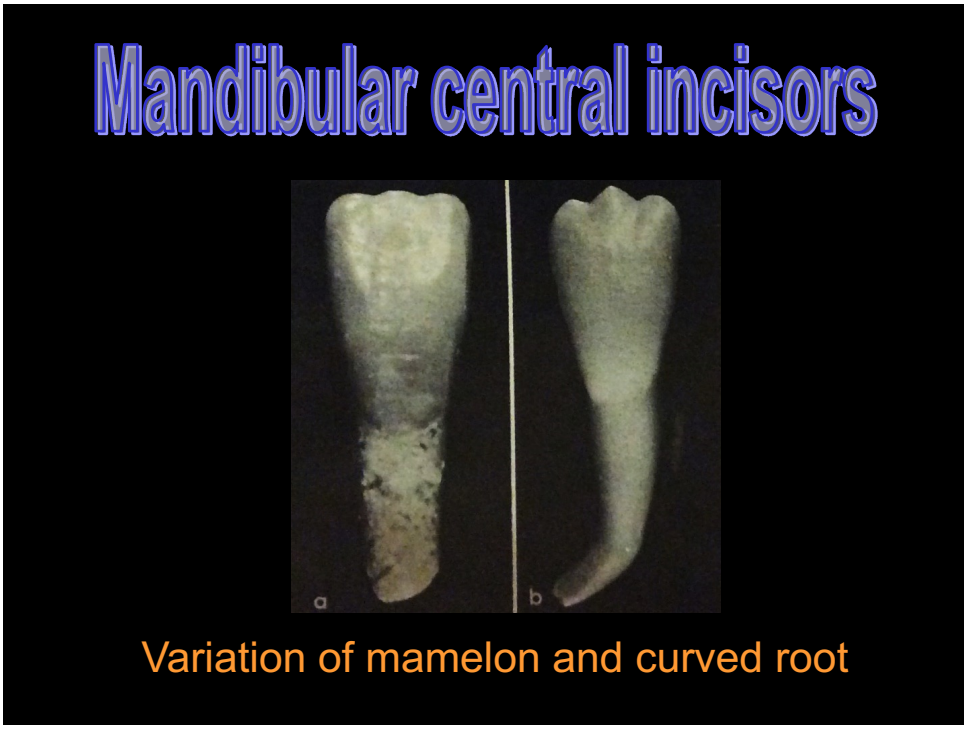
20


Mandibular central incisors
a
b
c

21


Mandibular central incisors
a
b
c
d
Variation of labial surface inclination

22


Mandibular central incisors
a
b
Variation of mamelon and curved root

23


NEXT 92 km
Mandibular lateral incisors

24

Mandibular lateral incisors

ฟันตัดแท้ล่างซี่ข้าง

- Evidence of calcification 3-4 months
- Eruption 7-8 years
- Root completed 10 years
- Crown length 9 mm
- Root length 14 mm

25

Mandibular lateral incisors

Shape similar to lower central incisor

BUT :

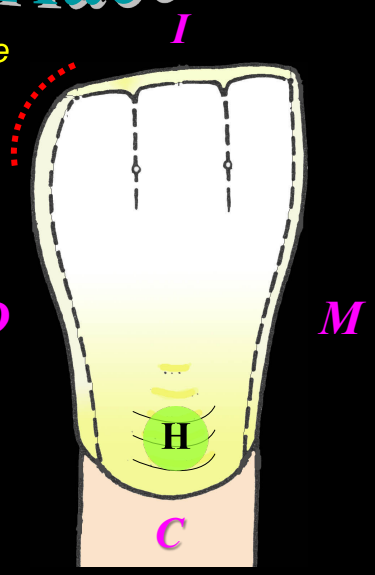
- Lack of bilateral symmetry
- Slightly bigger, wider, and longer due to more developed D lobe
- Crown: more concave & convex
- lingual anatomic features: more prominent



26

Labial surface

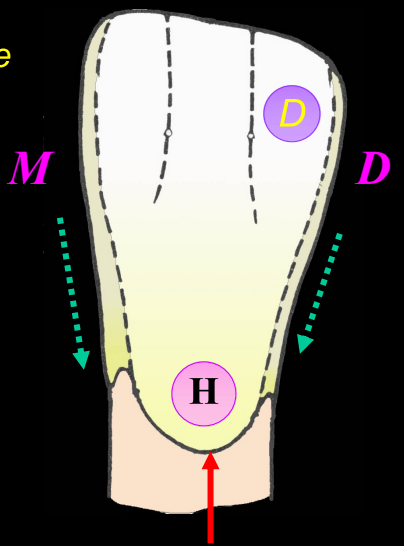
- DI angle : more rounded, obtuse
- D border: I 1/2 : more convex
  C 1/2 : more concave
- Deeper developmental grooves
- Lobe
  width : C > D > M
  length : C > M > D
  convexity : C > M > D
- Height of contour : cervical 1/3



28

Lingual surface

- D border: I 1/2 : more convex
  C 1/2 : more concave
- More C convergence
- Inc 1/3:
  lobe prominent D > M > C
- C line : curve distally
- Height of contour: cervical 1/3
  cingulum more prominent



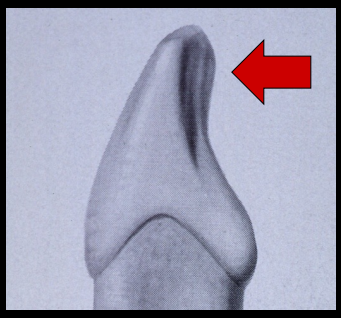
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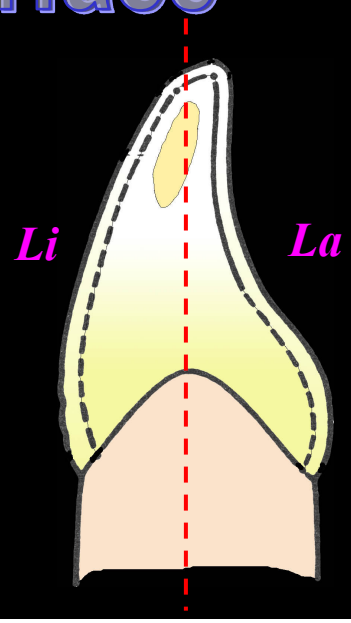
Mesial surface

M surface ~ central incisor's

but slightly bigger & thicker

Prominent D lobe can be seen

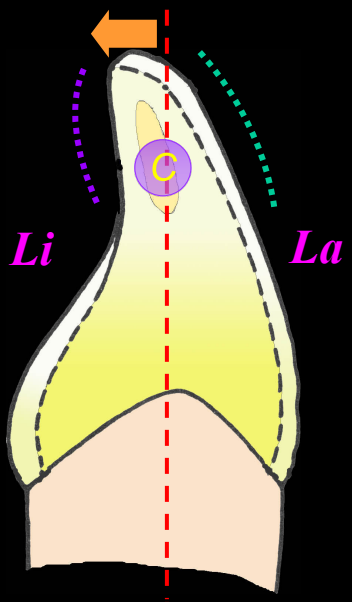




30

Distal surface

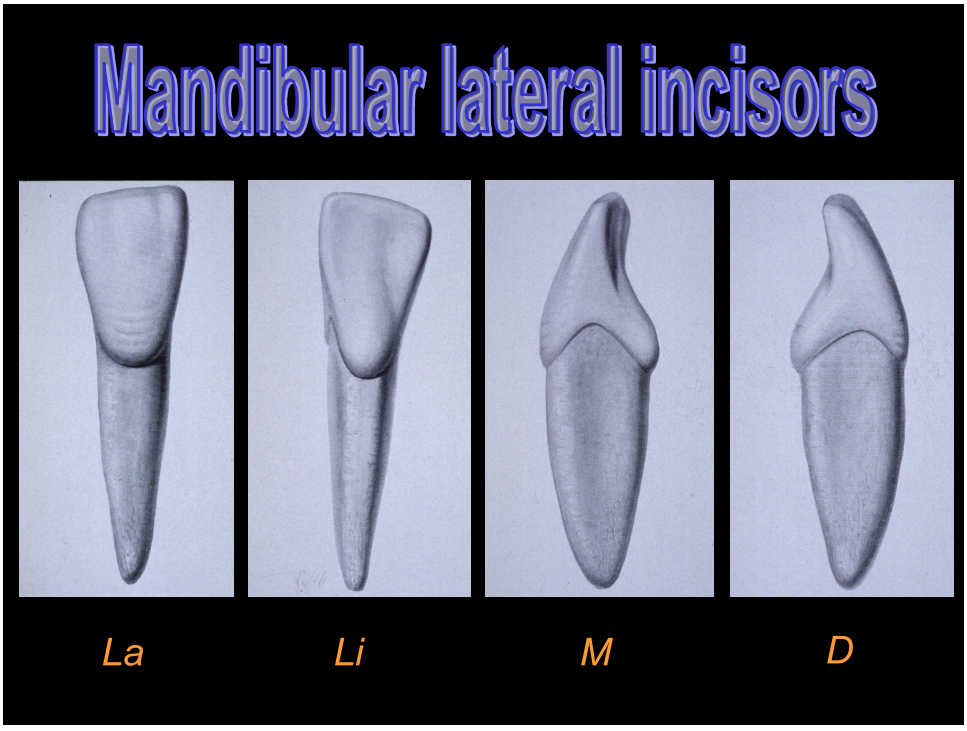
- *More developed D lobe:*
  - *Inc. edge bends to Li*
  - *D marginal ridge*
  - *La border (inc 1/3) curve > M surface*
- *contact area: slightly shorter I-C, more cervical than M contact*



31



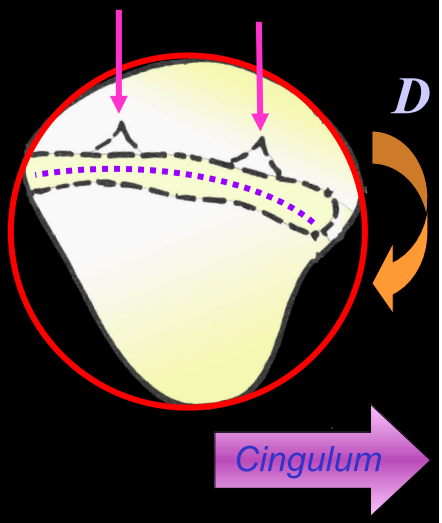
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33

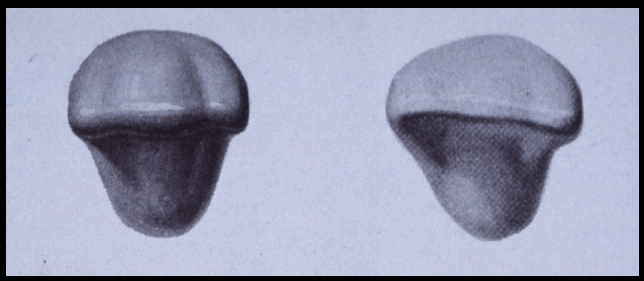
Incisal surface

- Outline : more round compared to centrals
- La grooves : deeper
- Distal lobe - larger > M lobe
  - bend to lingual
- Incisal edge:
  D-Li twist on root axis



34

Mandibular Incisors

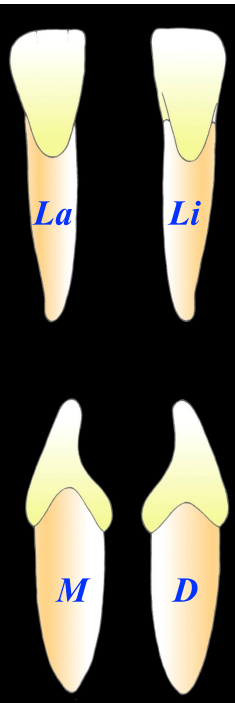


Incisal view
41 vs 42

35

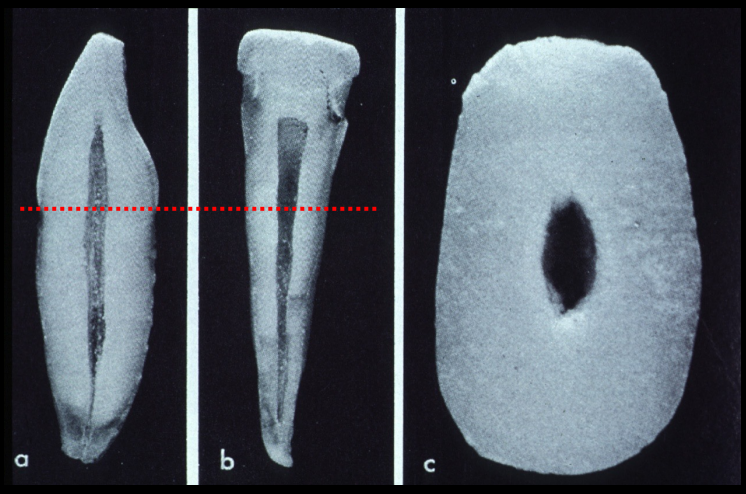
Root

- Similar to 31,41 but
  - slightly bigger: wider, thicker
  - little longer
- Proximal root concavity
- may have 2 root canals



36

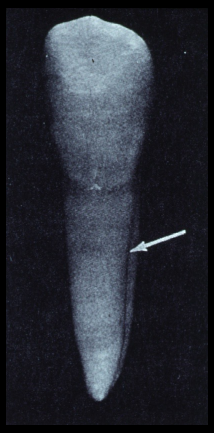
Mandibular lateral incisors



Similar to lower central incisors but bigger.

37

Mandibular lateral incisors



Proximal root concavity



Extremely curved root

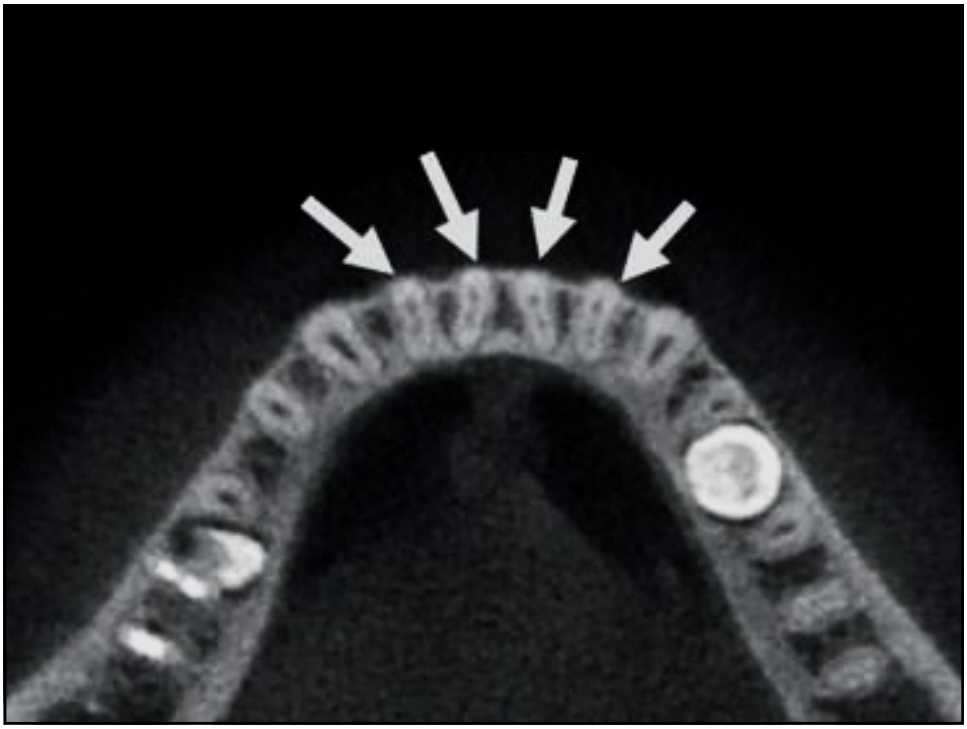
38

Mandibular lateral incisors

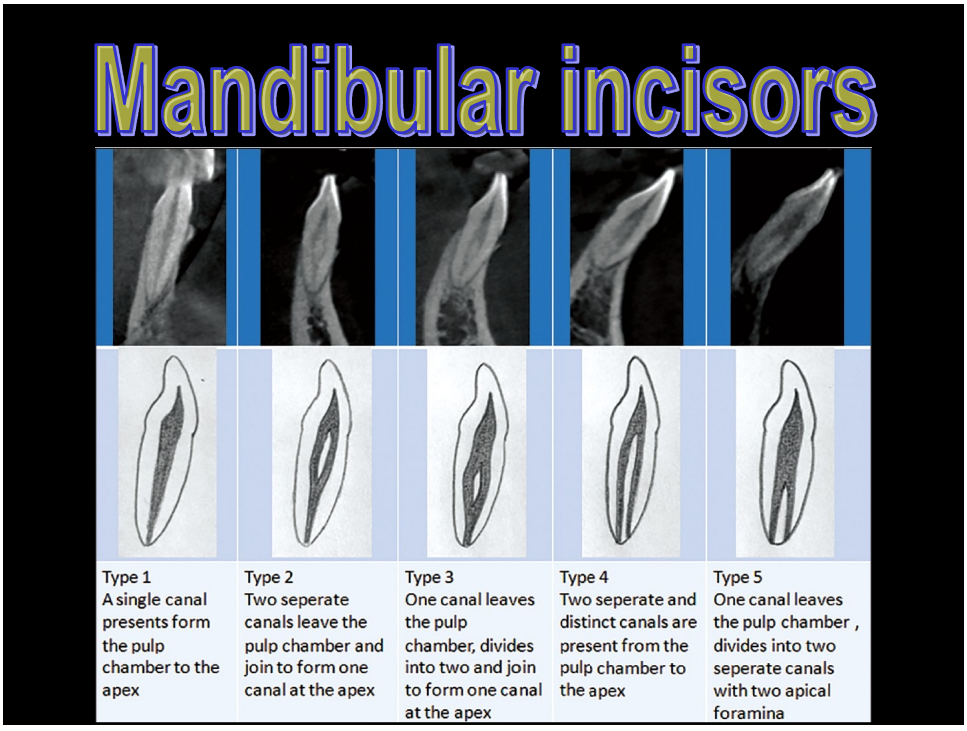


Cross section of mid 1/3 of root

39



40


Mandibular incisors
Type 1
A single canal presents form the pulp chamber to the apex
Type 2
Two seperate canals leave the pulp chamber and join to form one canal at the apex
Type 3
One canal leaves the pulp chamber, divides into two and join to form one canal at the apex
Type 4
Two seperate and distinct canals are present from the pulp chamber to the apex
Type 5
One canal leaves the pulp chamber , divides into two seperate canals with two apical foramina

41

Mandibular incisors

Dental Anomalies: Talon cusp





42

Dental Anomalies





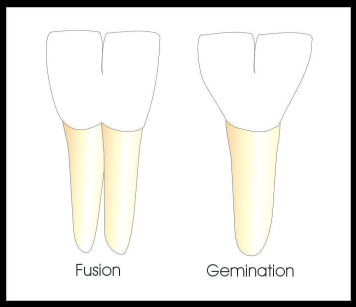




Figure 4. Intraoral view showing the anterior open bite and dental anomalies of form and number in the mandibular incisal region.

43

Upper vs Lower Incisors

Table 2-2 MAJOR ARCH TRAITS THAT DISTINGUISH MAXILLARY FROM MANDIBULAR INCISORS

	MAXILLARY INCISORS	MANDIBULAR INCISORS
LABIAL VIEW	Wider crowns mesiodistally	Narrower crowns mesiodistally
	Less symmetrical crown	More symmetrical crowns
	More rounded mesial and distal incisal angles	More square mesial and distal incisal angles
	Contact areas more cervical	Contact areas very incisal
LINGUAL VIEW	Lingual anatomy more distinct:	Lingual surface smoother:
	Pronounced marginal ridges	Almost no marginal ridges
	Deeper lingual fossa	Shallower lingual fossa
	Sometimes lingual pits	No pits
	Larger cingulum	Smaller cingulum
PROXIMAL VIEWS	Incisal edge on or labial to mid-root axis line	Incisal edge on or lingual to mid-root axis line
	Facets on lingual slope of incisal edge	Facets on labial slope of incisal edge
INCISAL VIEW	Crowns wider mesiodistally than faciolingually	Crowns wider faciolingually than mesiodistally
	Plus traits seen from lingual view can also be seen from the incisal view	

44



45