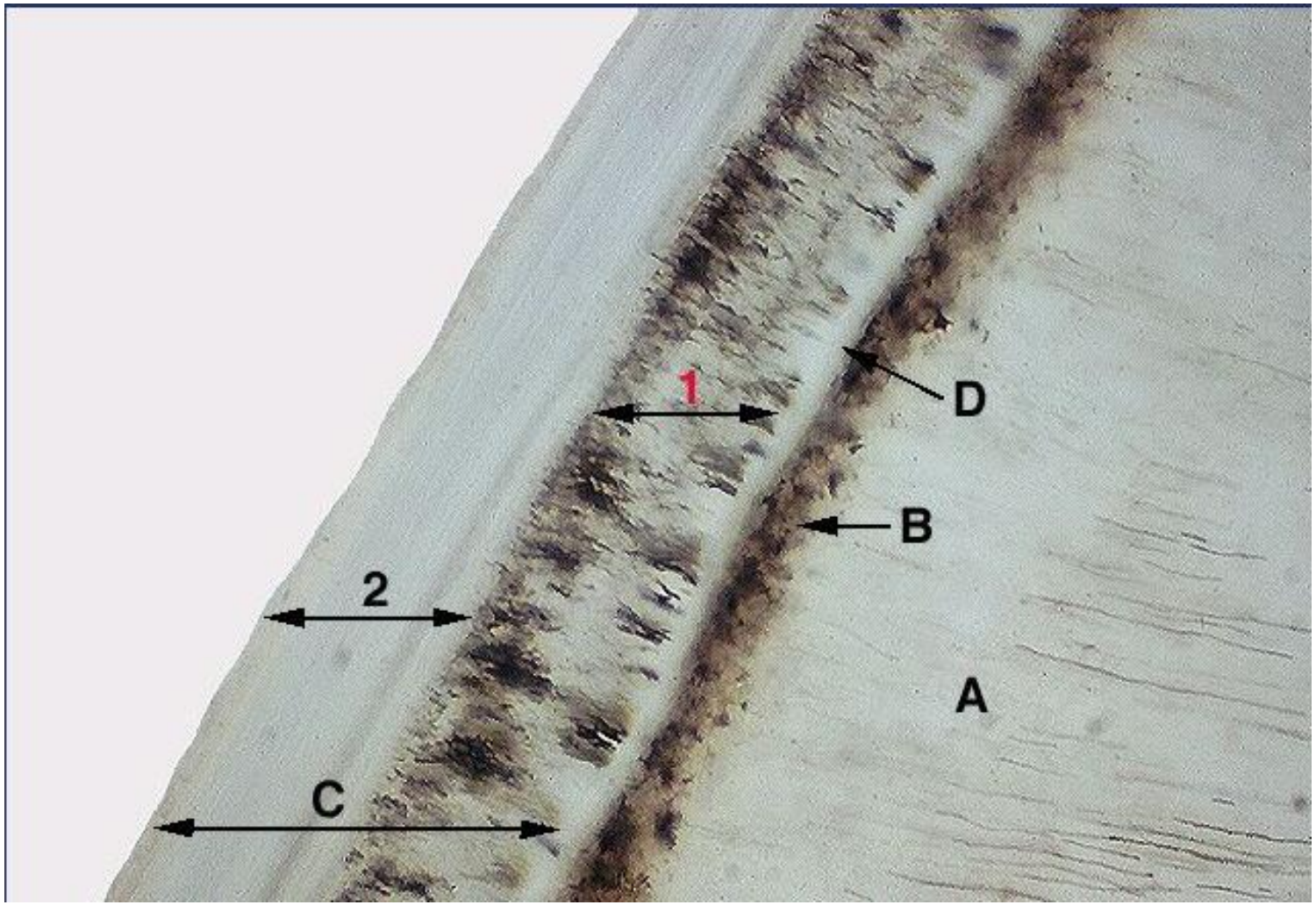
CEMENTUM

1]Intermediate cementum

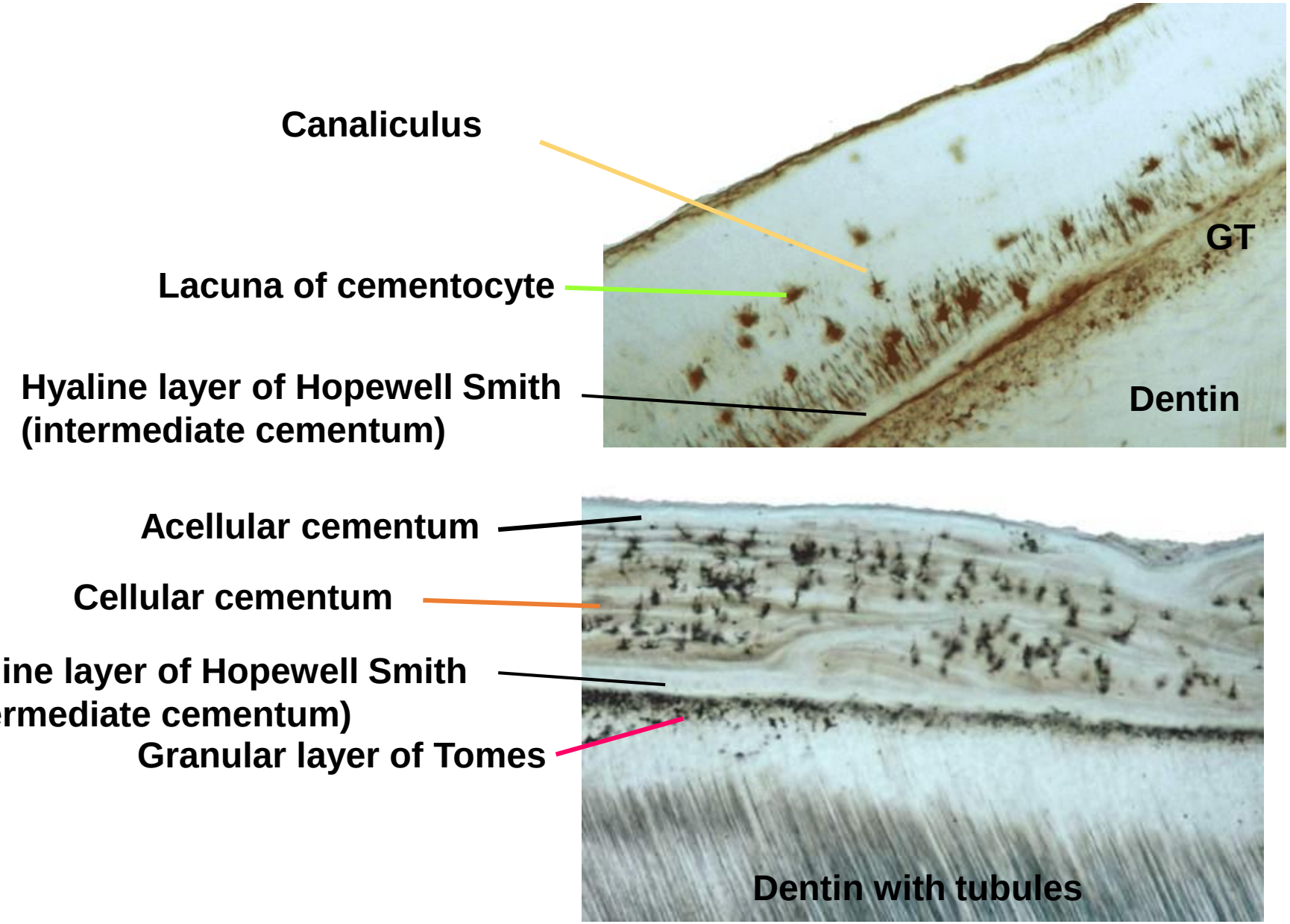
Hyaline layer of Hopewell smith



A - dentin
B - Tomes' granular layer
C – (AEFC) primary cementum
D - hyaline layer of Hopewell smith (intermediate cementum)

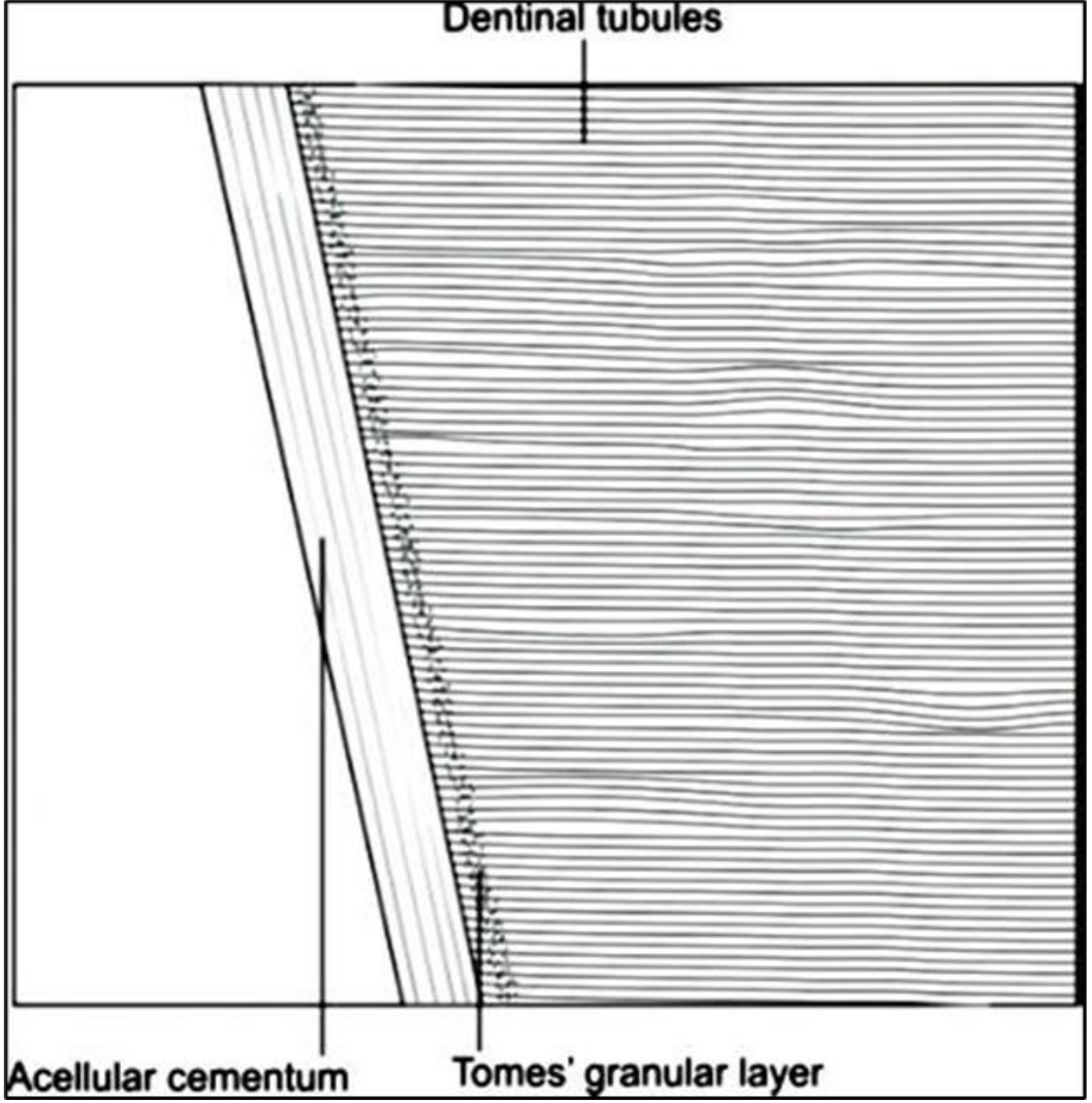
1. *Acellular cementum with hypocalcified sharpy's fibers*

2. *Acellular cementum with normally calcified sharpy's fibers*

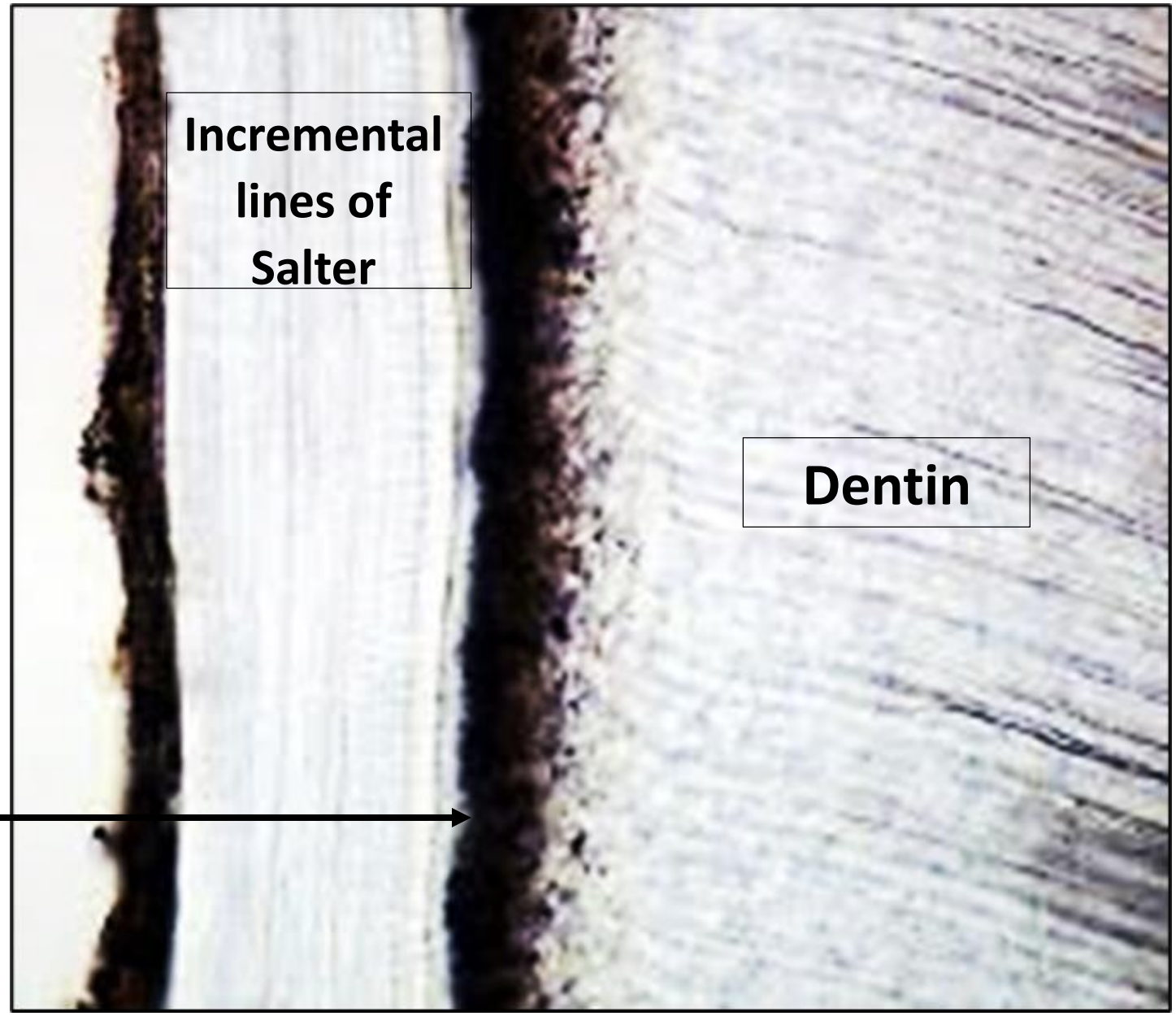

Canaliculus
Lacuna of cementocyte
Hyaline layer of Hopewell Smith
(intermediate cementum)
GT
Dentin
Acellular cementum
Cellular cementum
Hyaline layer of Hopewell Smith
(intermediate cementum)
Granular layer of Tomes
Dentin with tubules

2]Acellular cementum

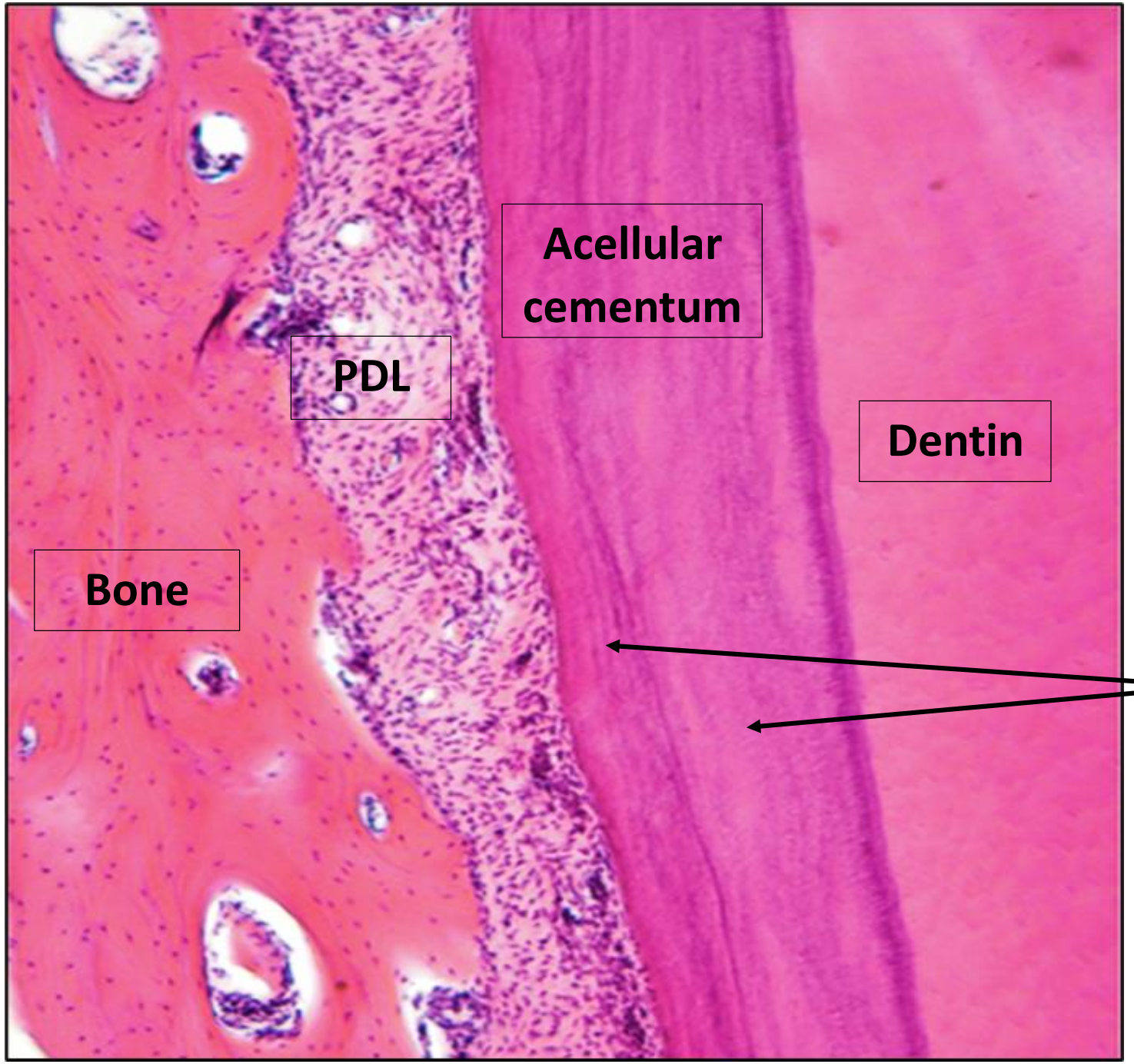
diagram of acellular cementum

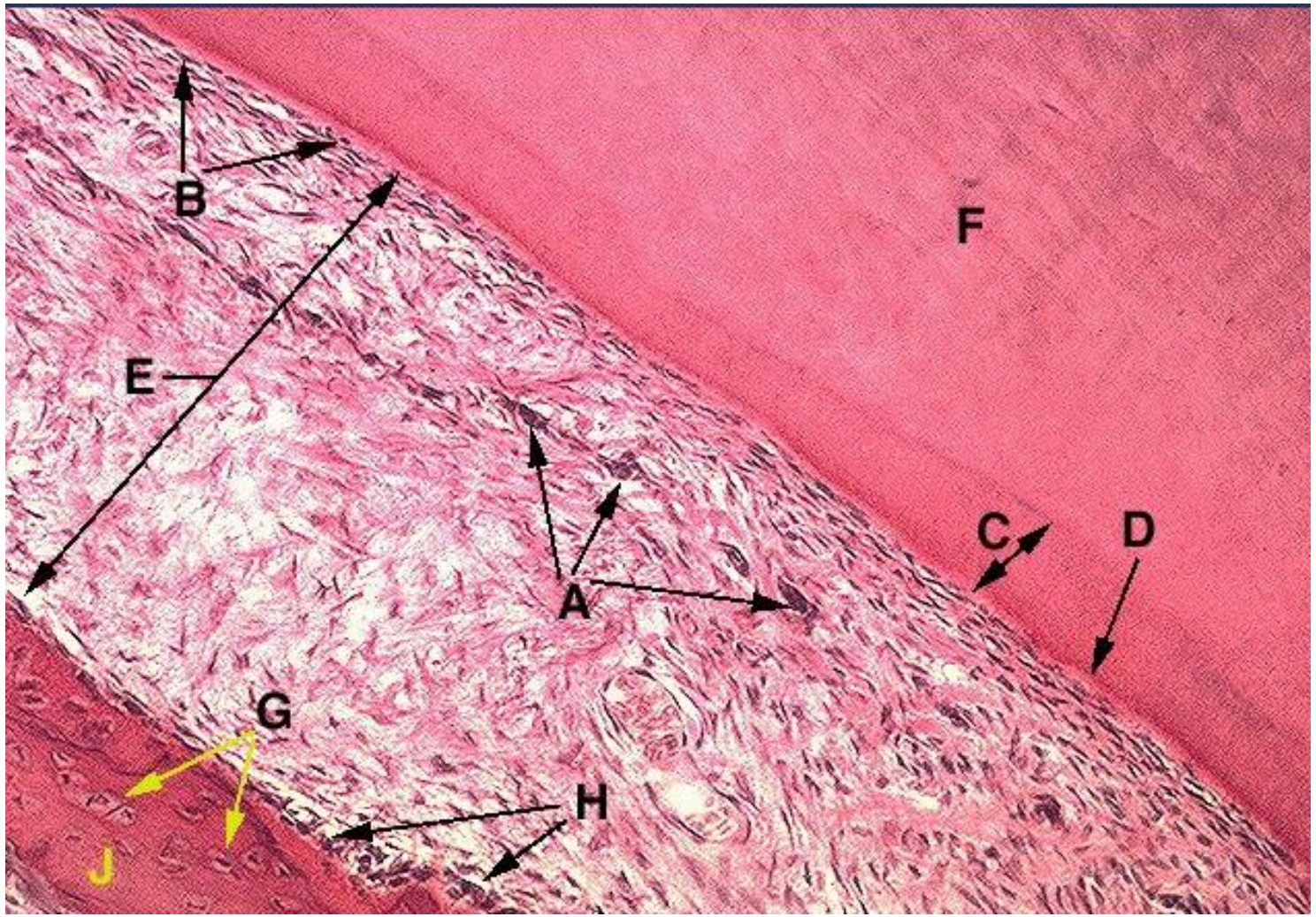


Acellular cementum in ground section

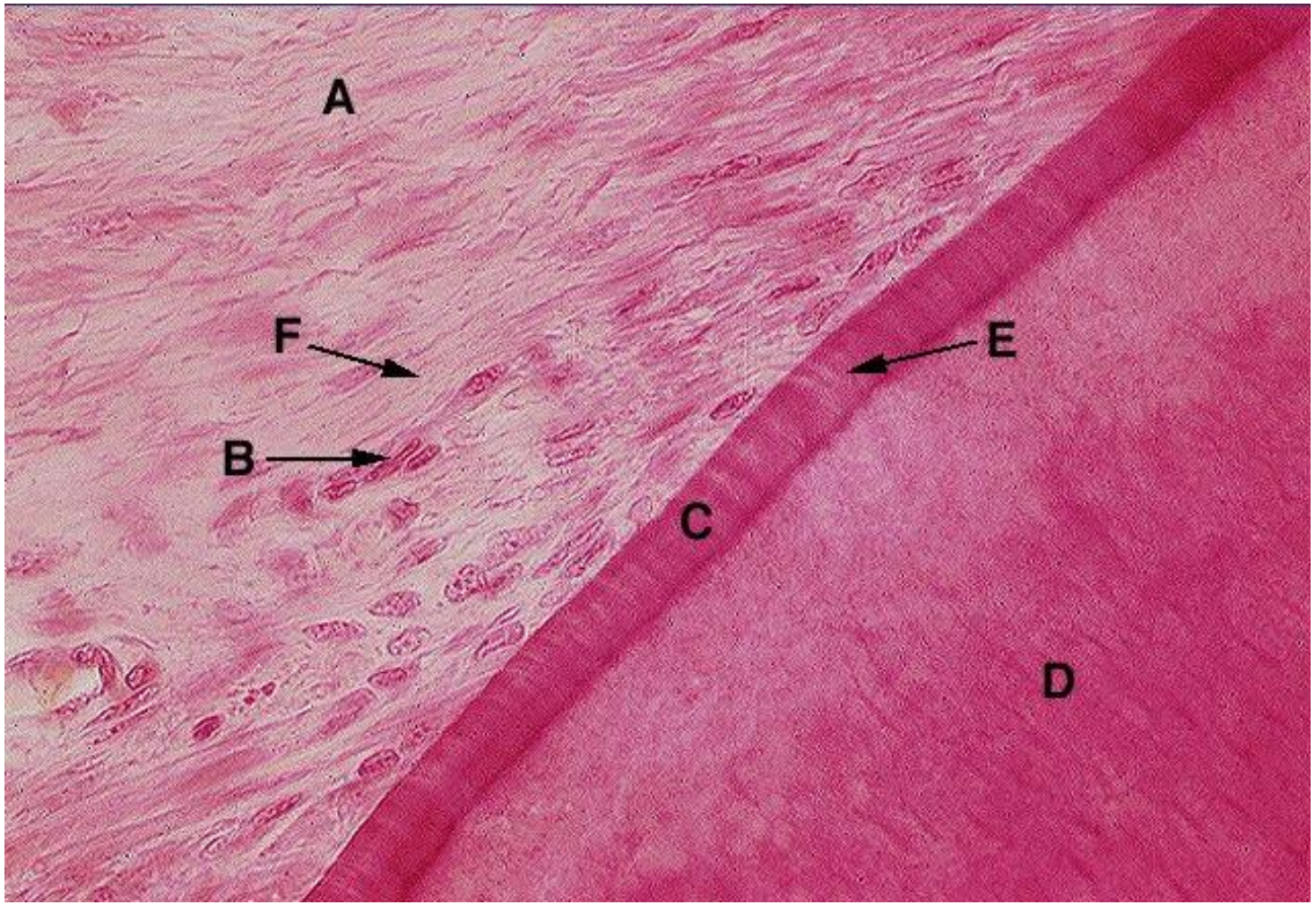


Acellular cementum in decalcified section





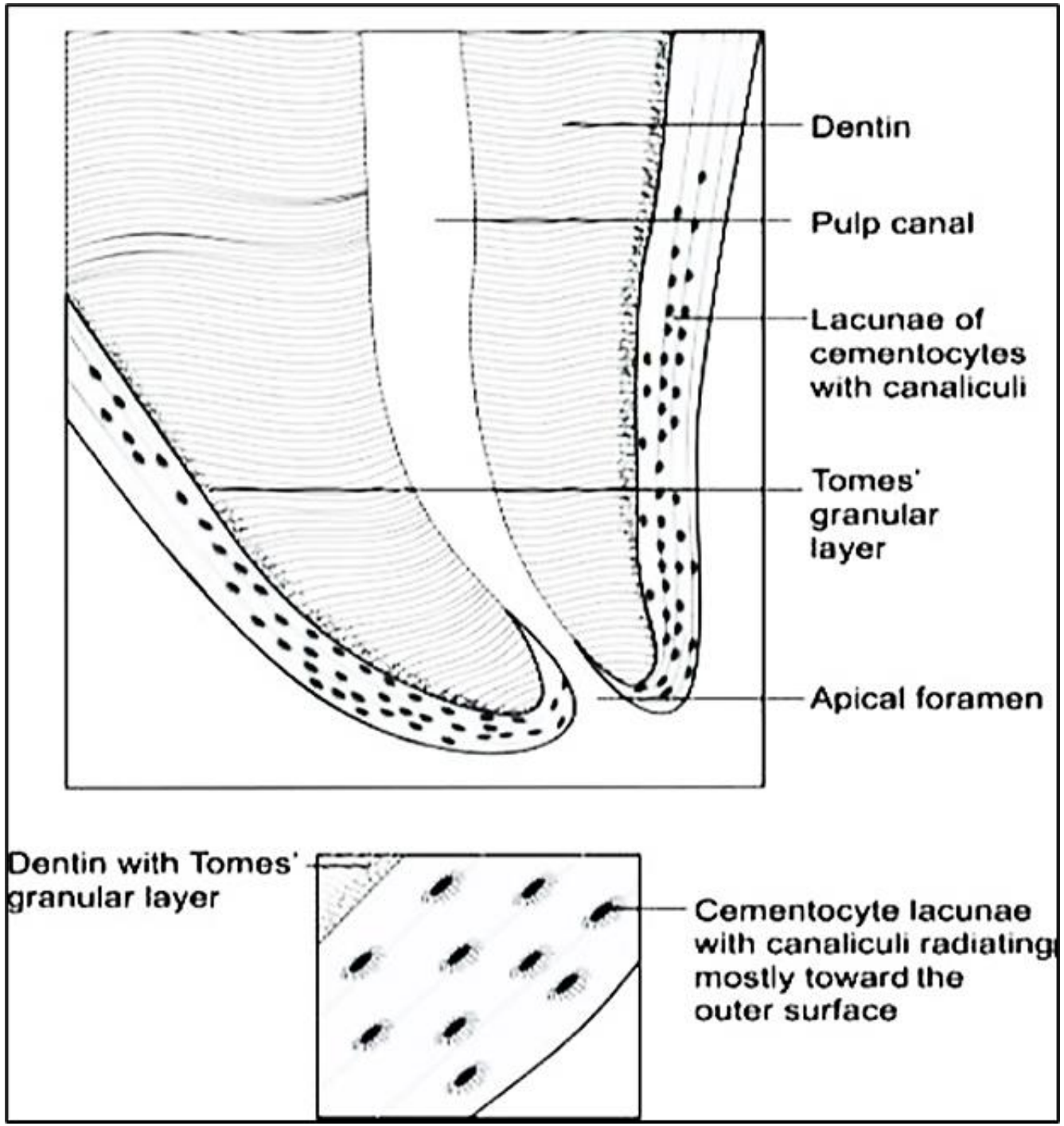
A - epithelial rests
B - cementoblasts
C – (AEFC) cementum
D – cementoid (cementum matrix)
E - periodontal region
F - dentin
G - osteocytes
H - osteoblasts
J - alveolar bone



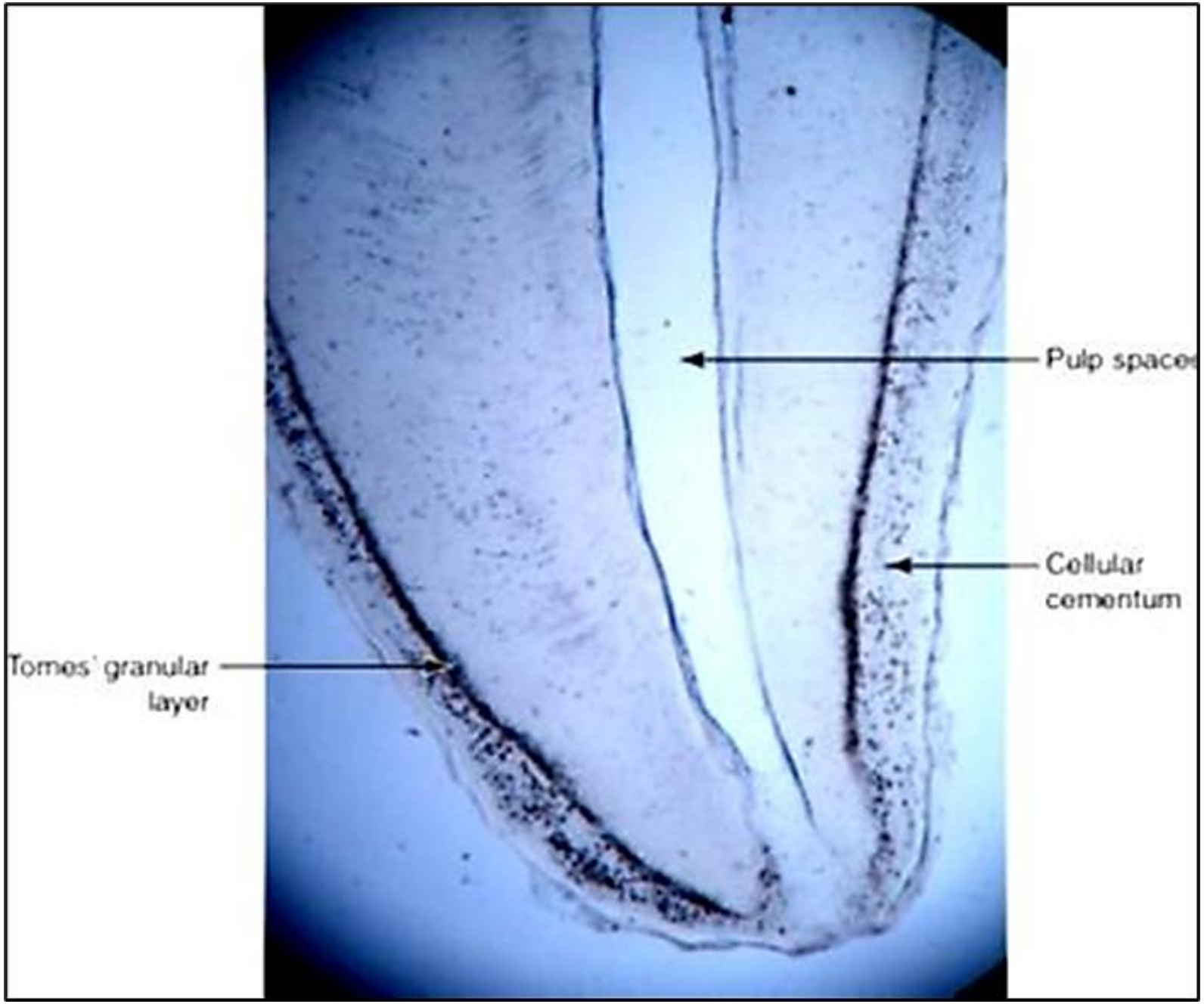
A - Periodontal ligament
B - Epithelial rests of malazes
C - (AEFC) 1ry cementum
D - Dentin
E - Sharpey's fibers
F -PDL fibers

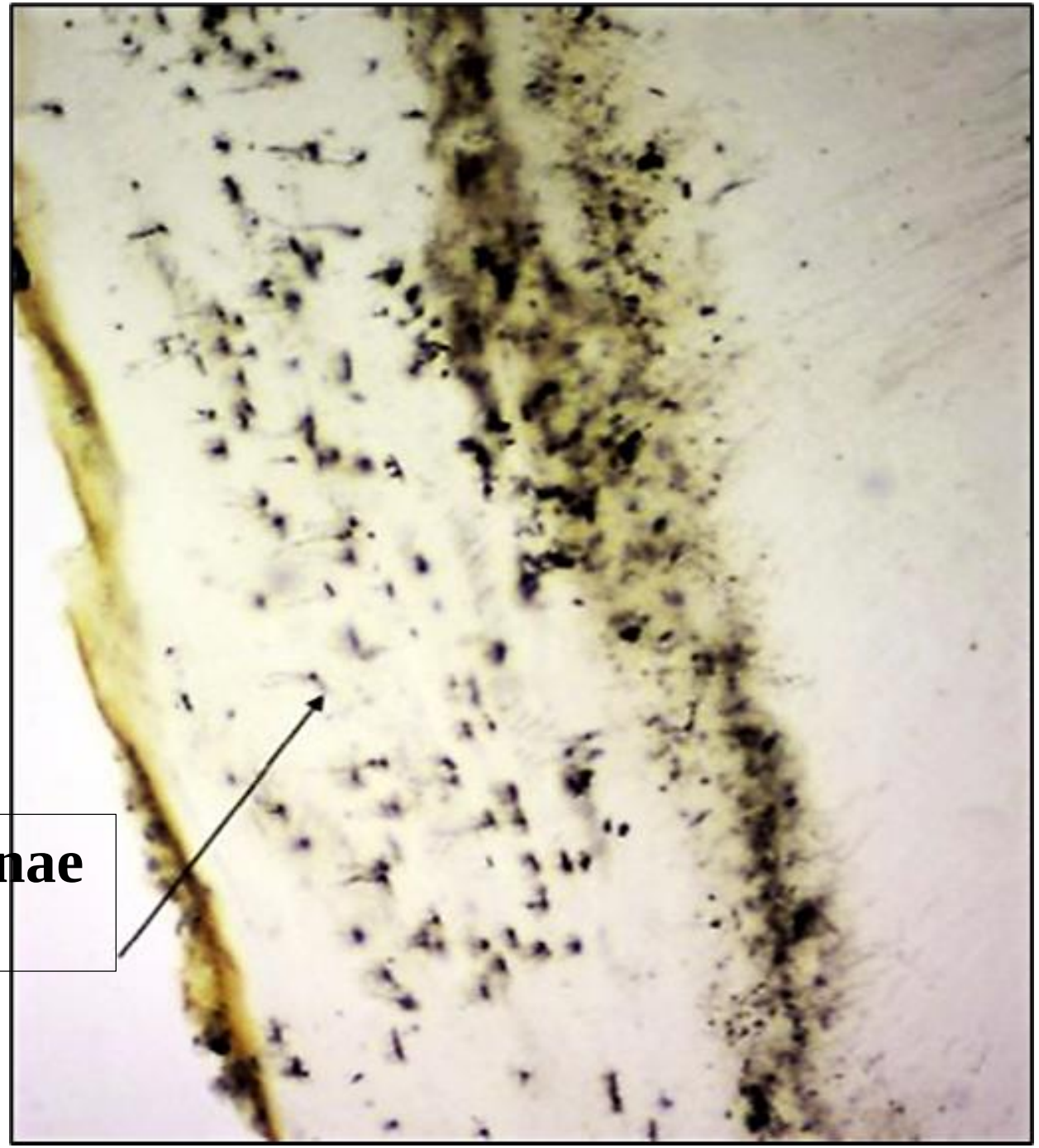
3]Cellular cementum

Cellular cementum diagram

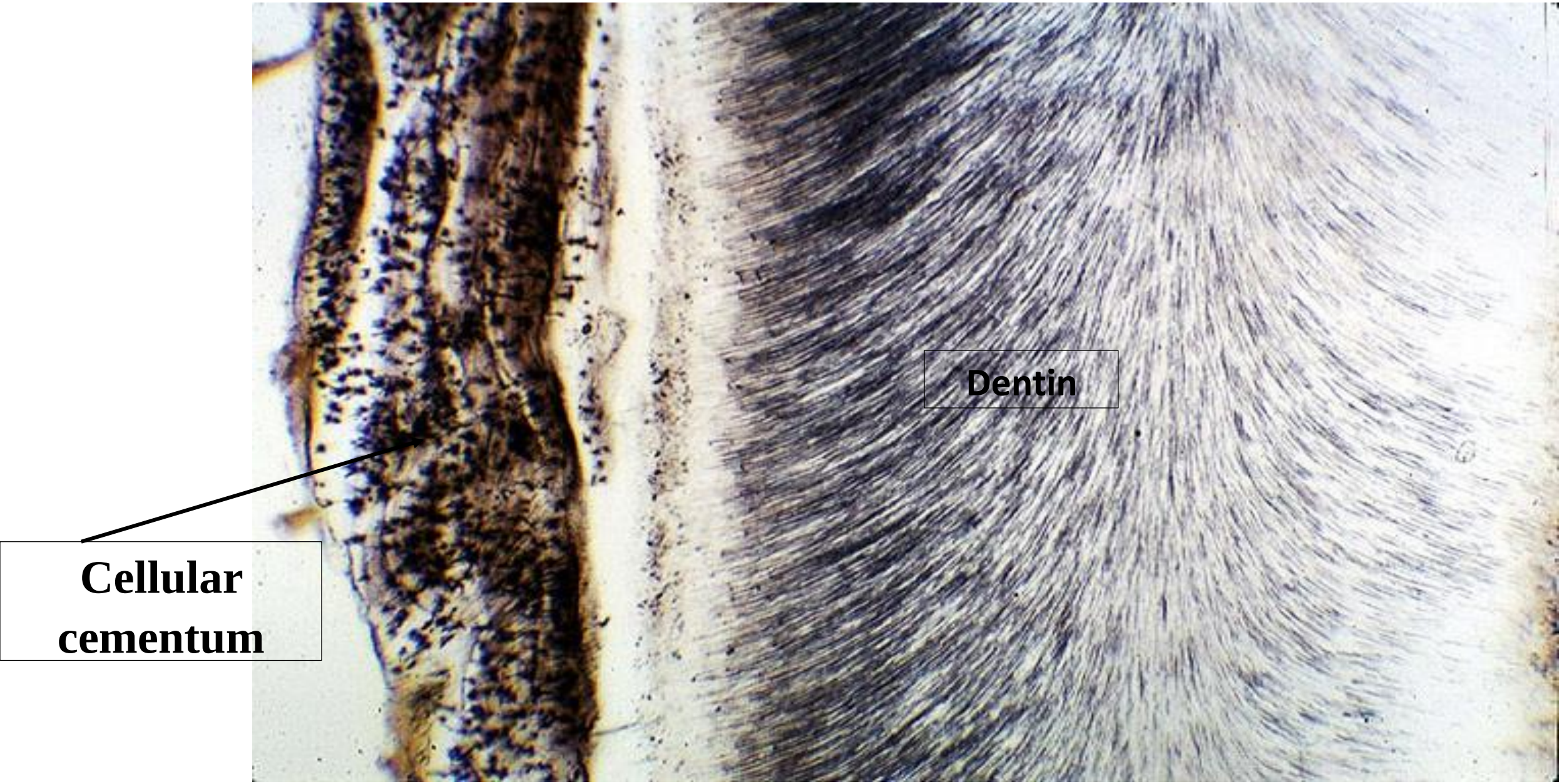


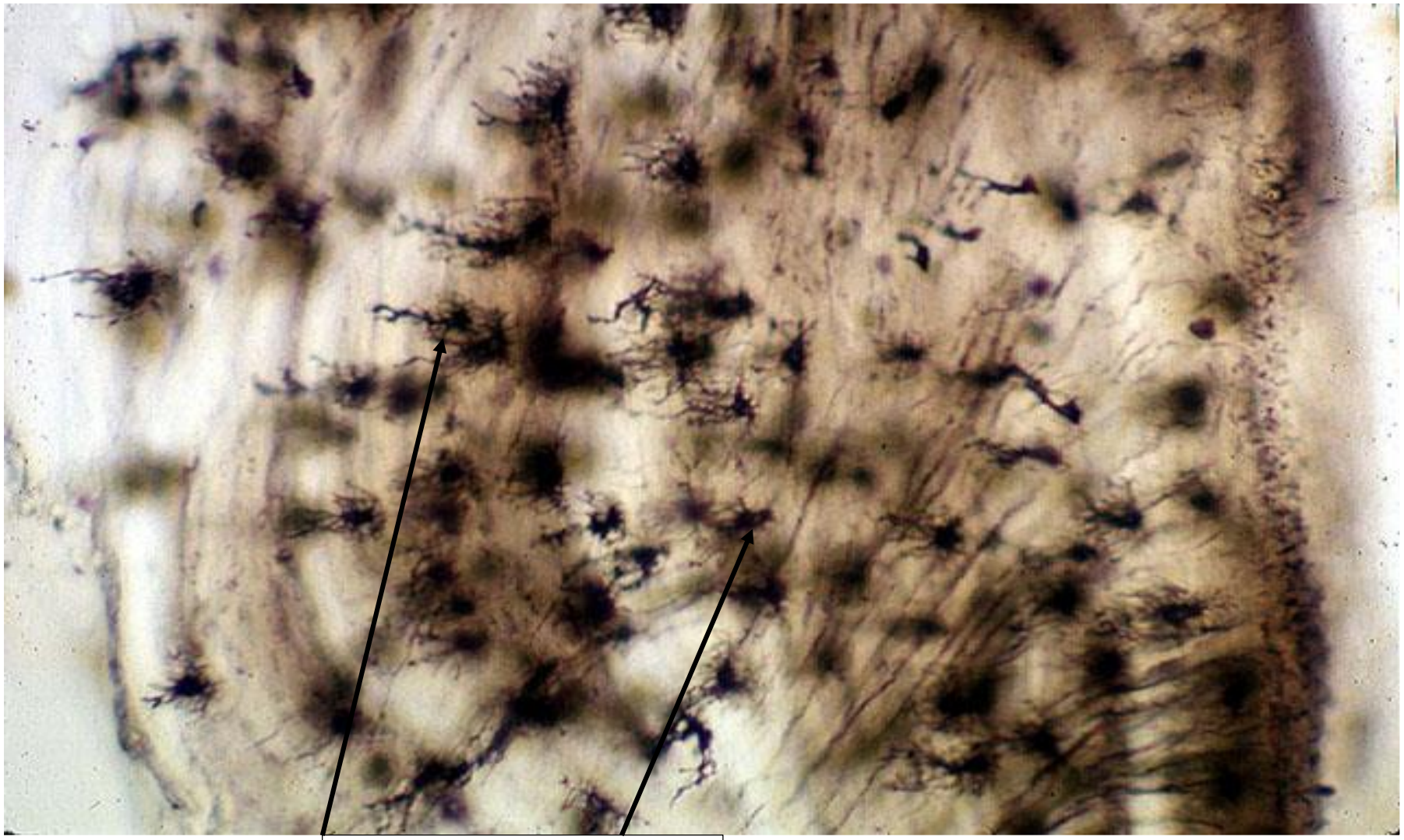
Cellular cementum in ground section

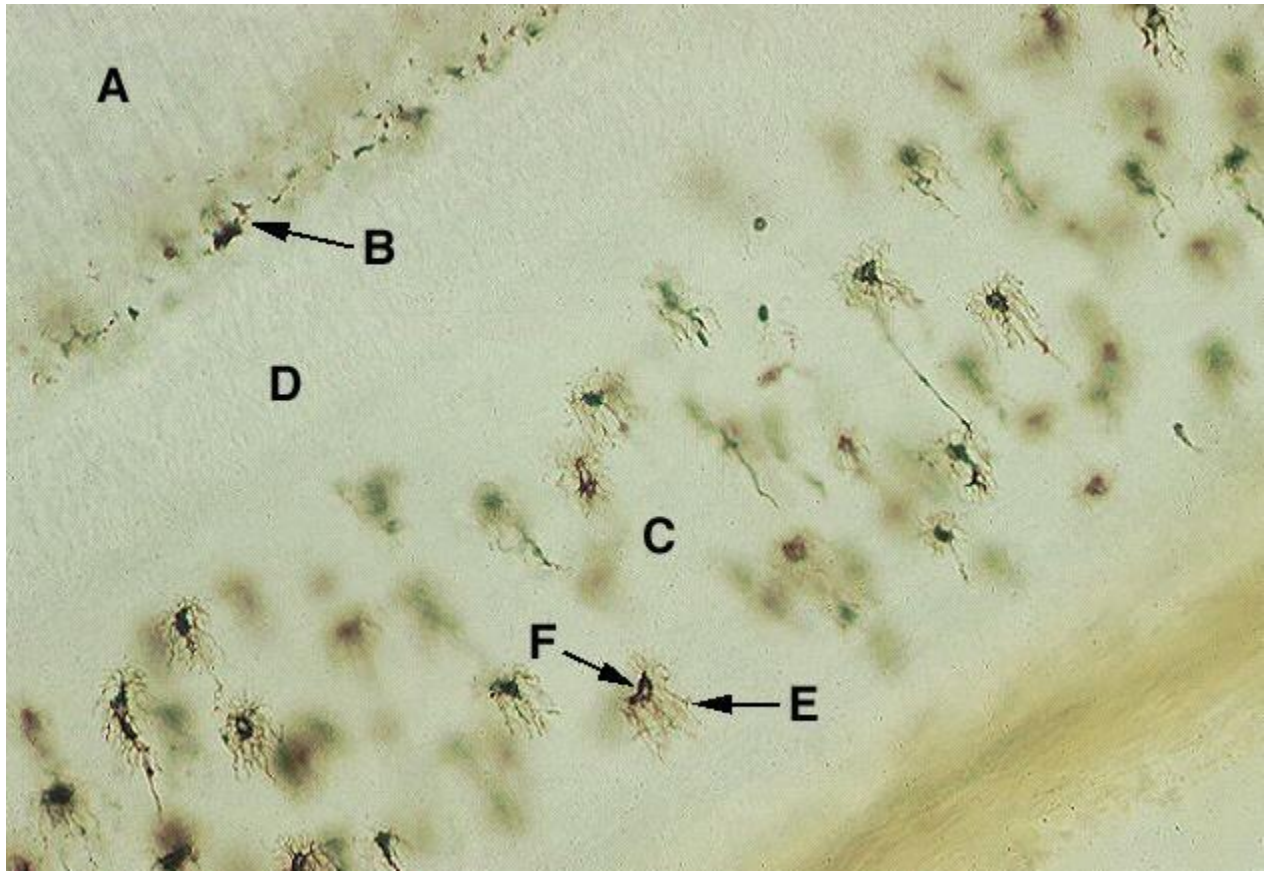




Cementocytes lacunae with canaliculi

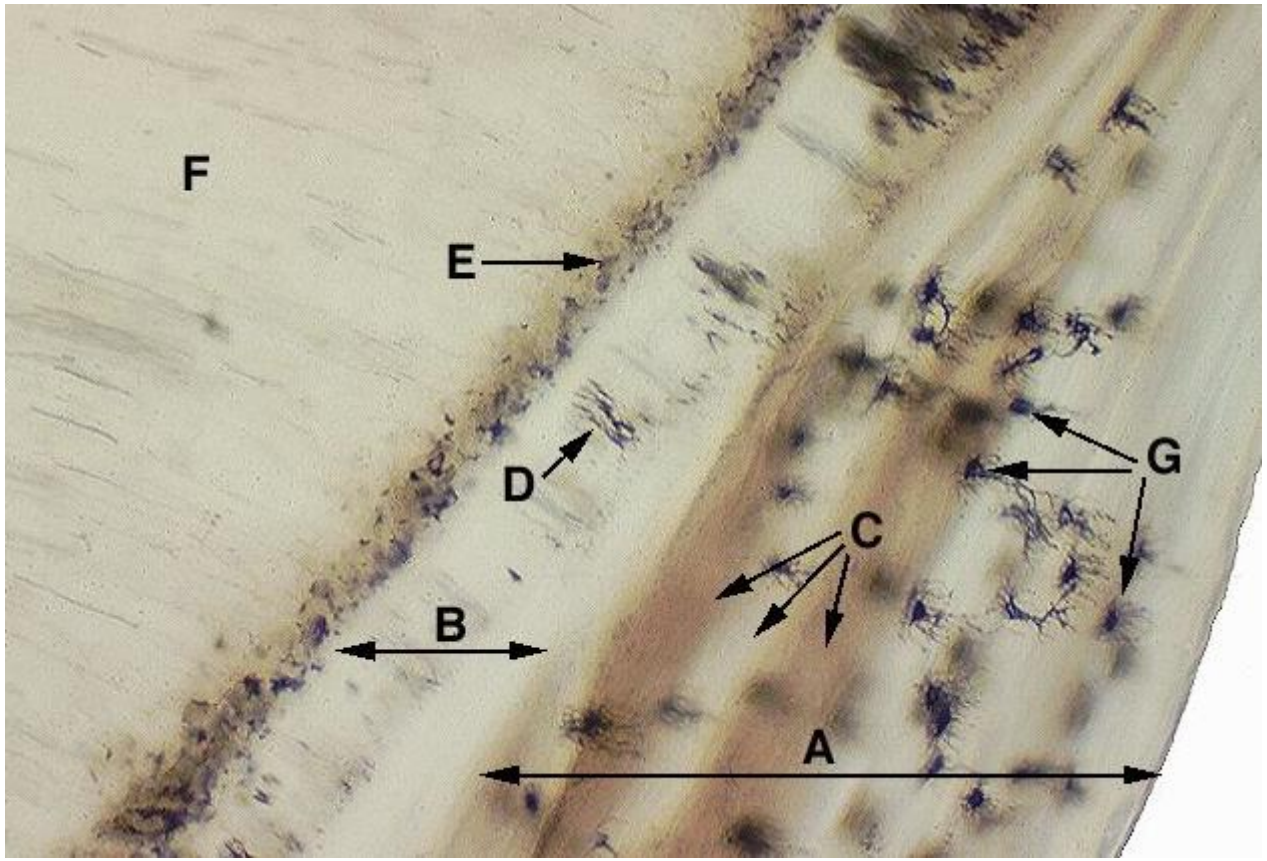

Dentin
Cellular cementum


Cementocytes
lacunae

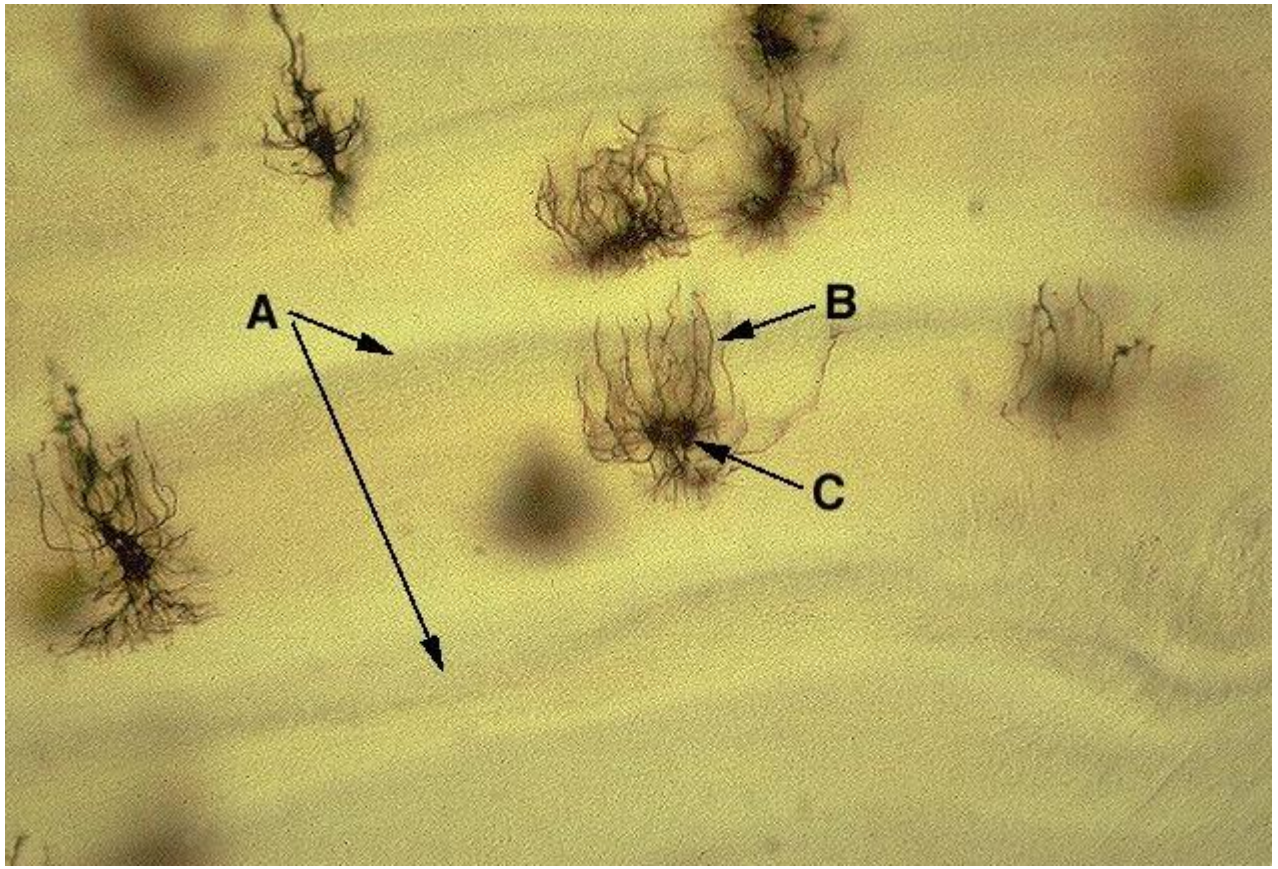


A - dentin
B - Tomes' granular layer
C - secondary cementum

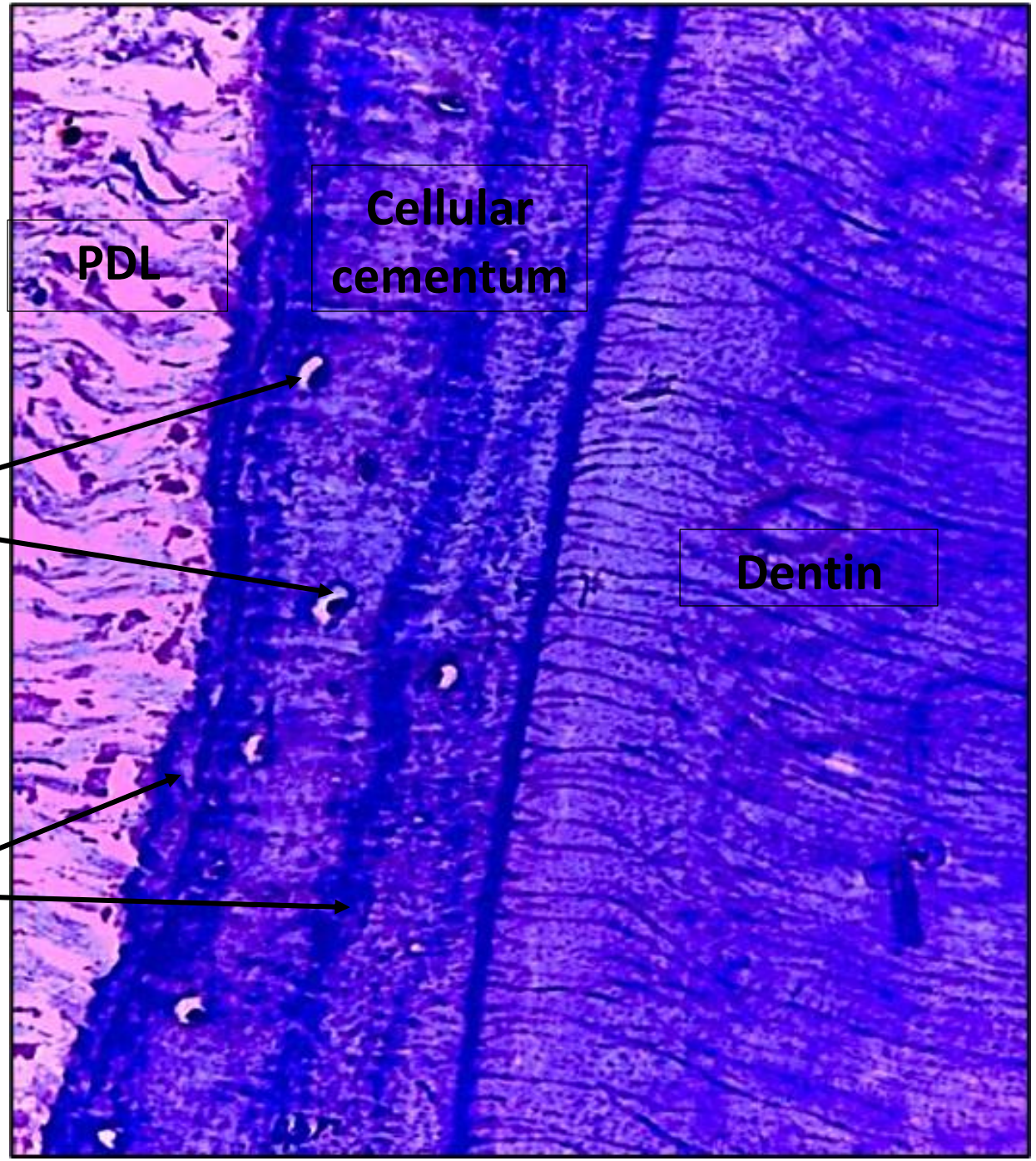
D - primary cementum
E - canaliculi
F - cementocyte lacuna



A - (CIFC) secondary cementum
B - (AEFC) primary cementum
C - incremental lines of salter
D -Sharpey's fibers
E - Tomes' granular layer
F - dentin
G - cementocyte lacunae



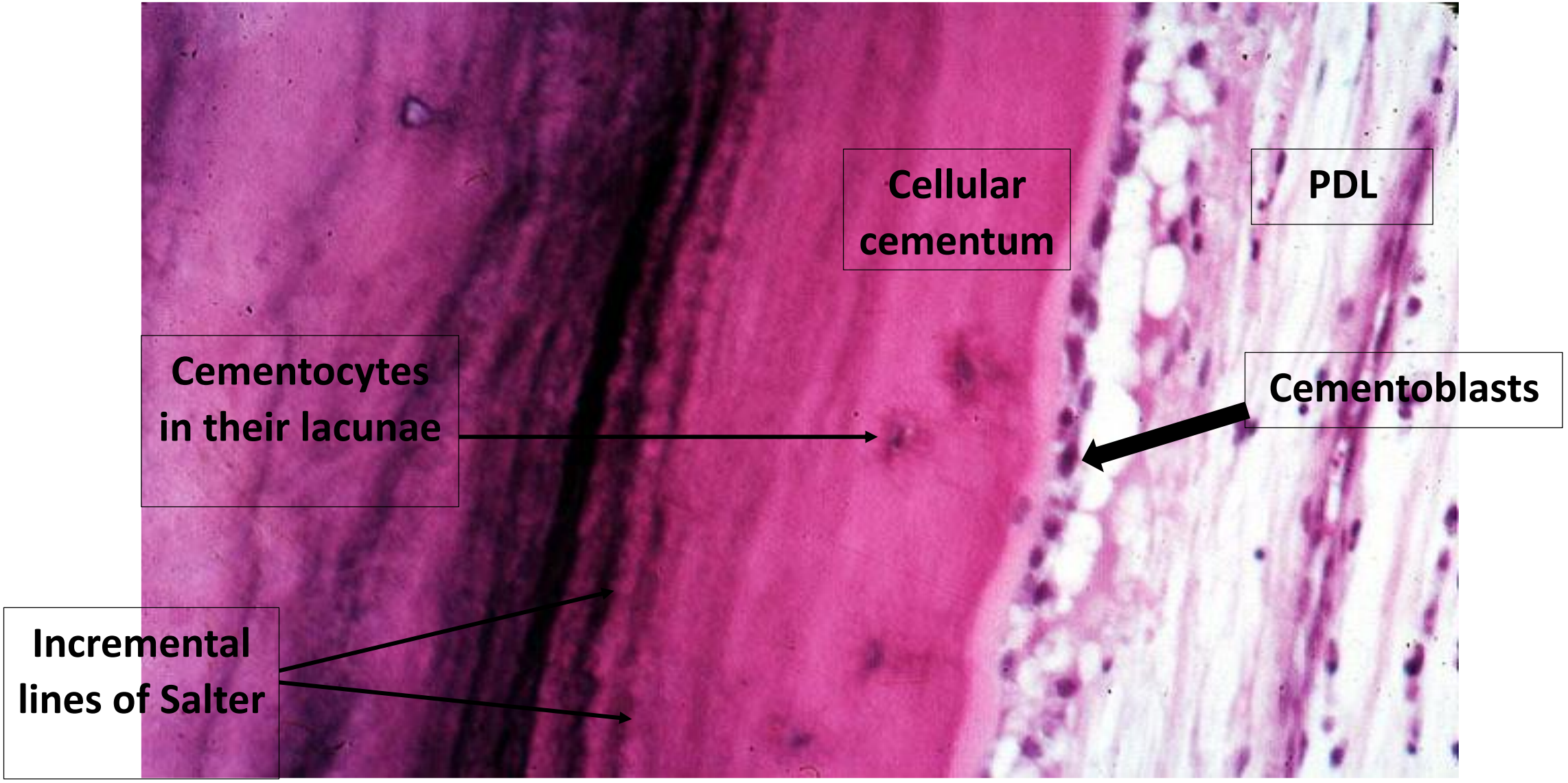
A - incremental lines of salter (resting lines)
B - cementocyte lacuna
C - canaliculi



Cementocytes in their lacunae

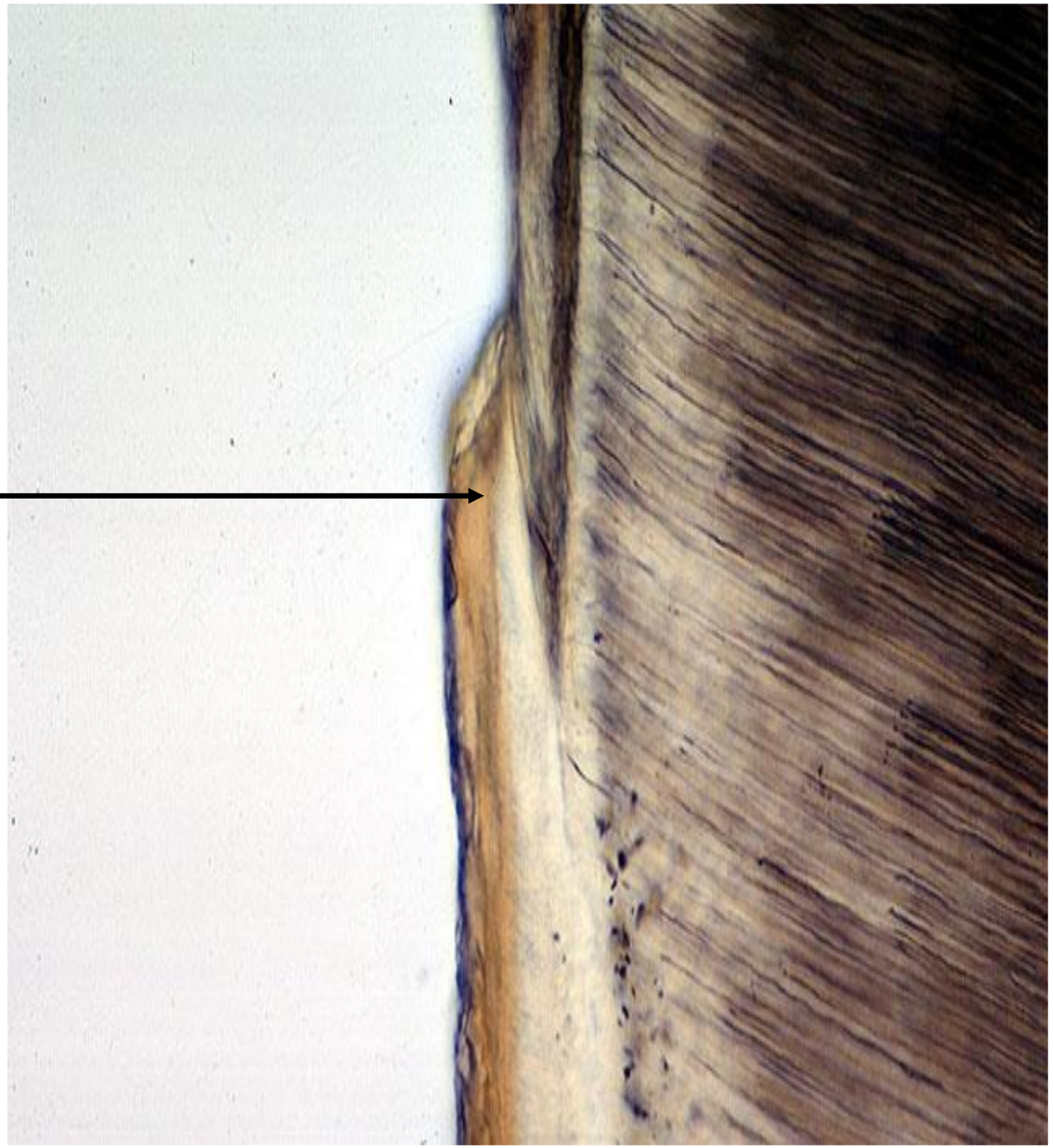
Incremental lines of Salter

Cellular cementum in decalcified section

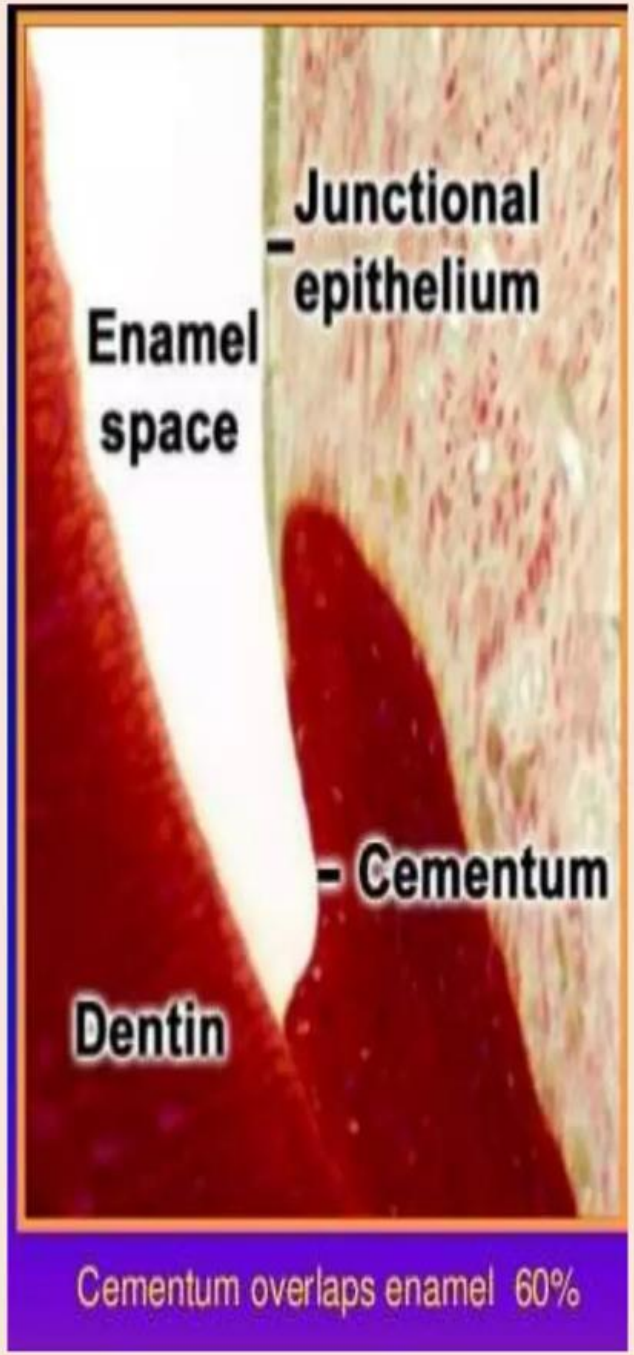

Cellular cementum
PDL
Cementocytes in their lacunae
Cementoblasts
Incremental lines of Salter

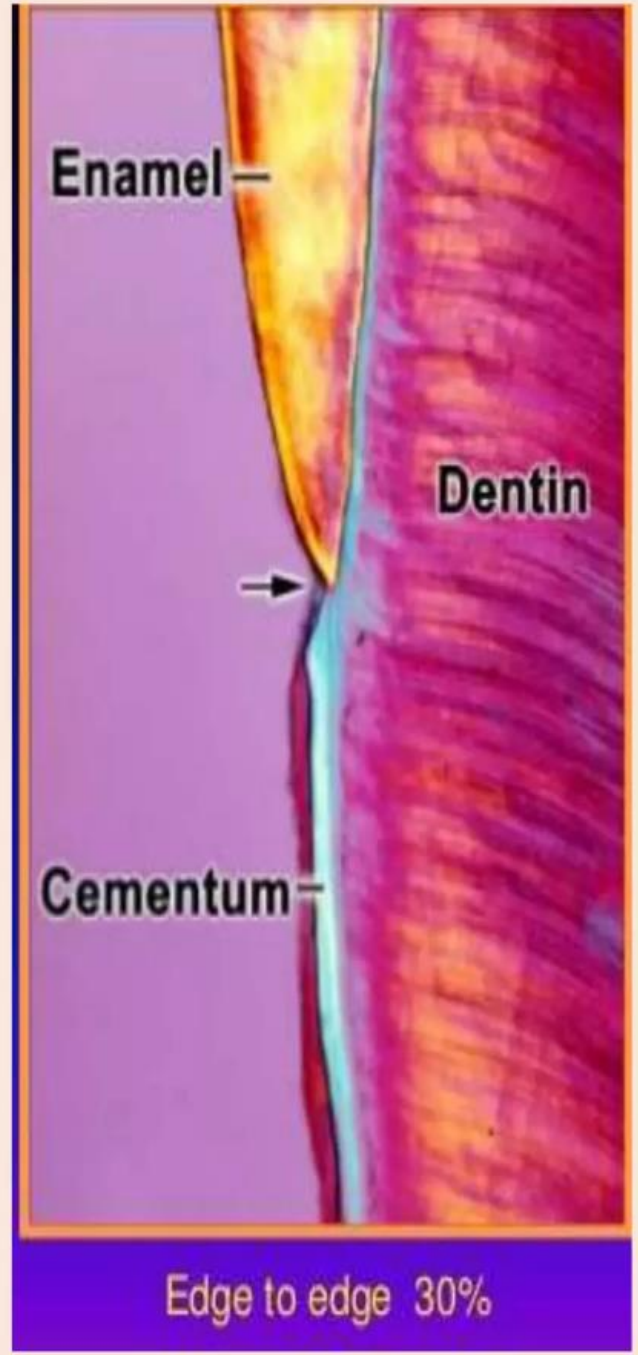
4]Afibrillar Acellular cementum

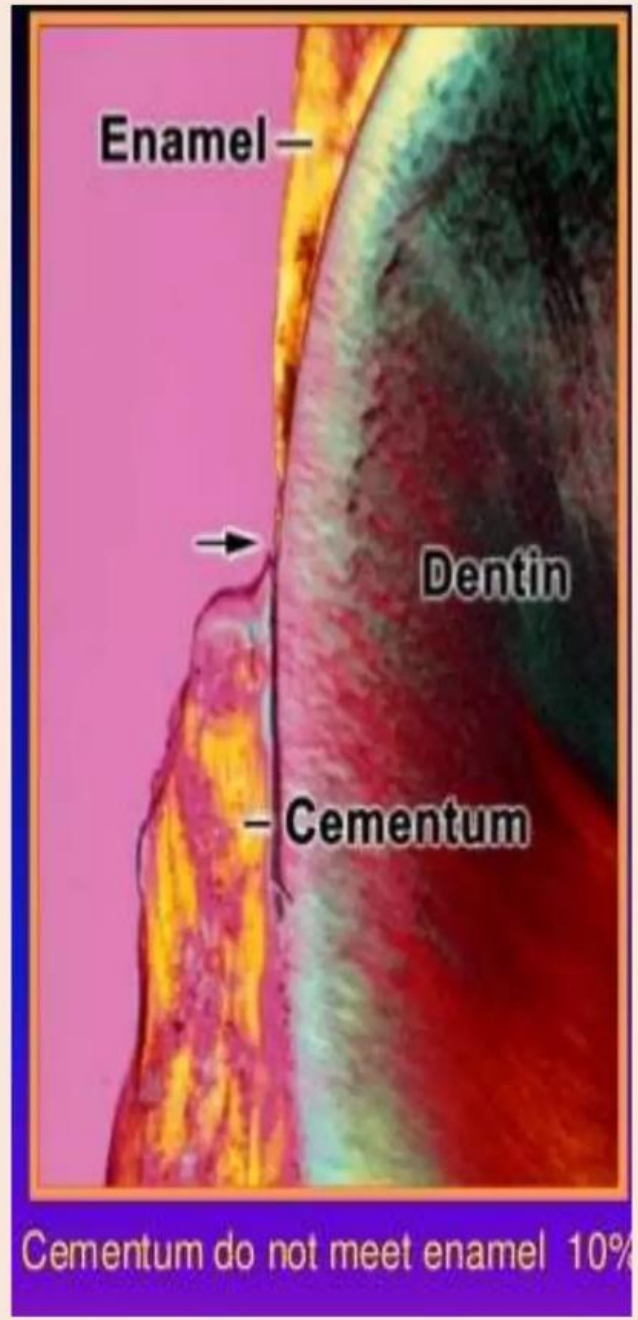
A fibrillar cementum in ground section

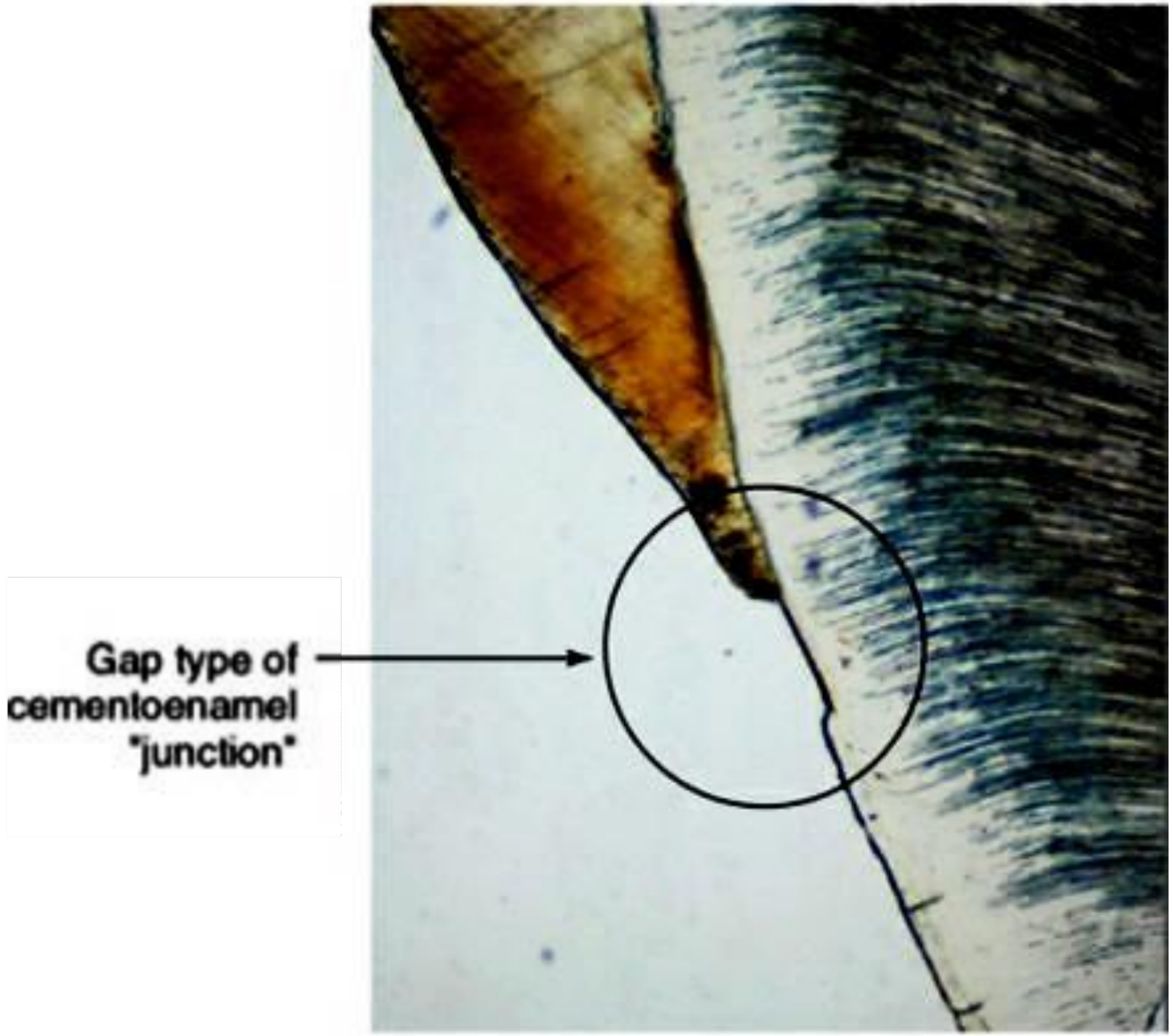


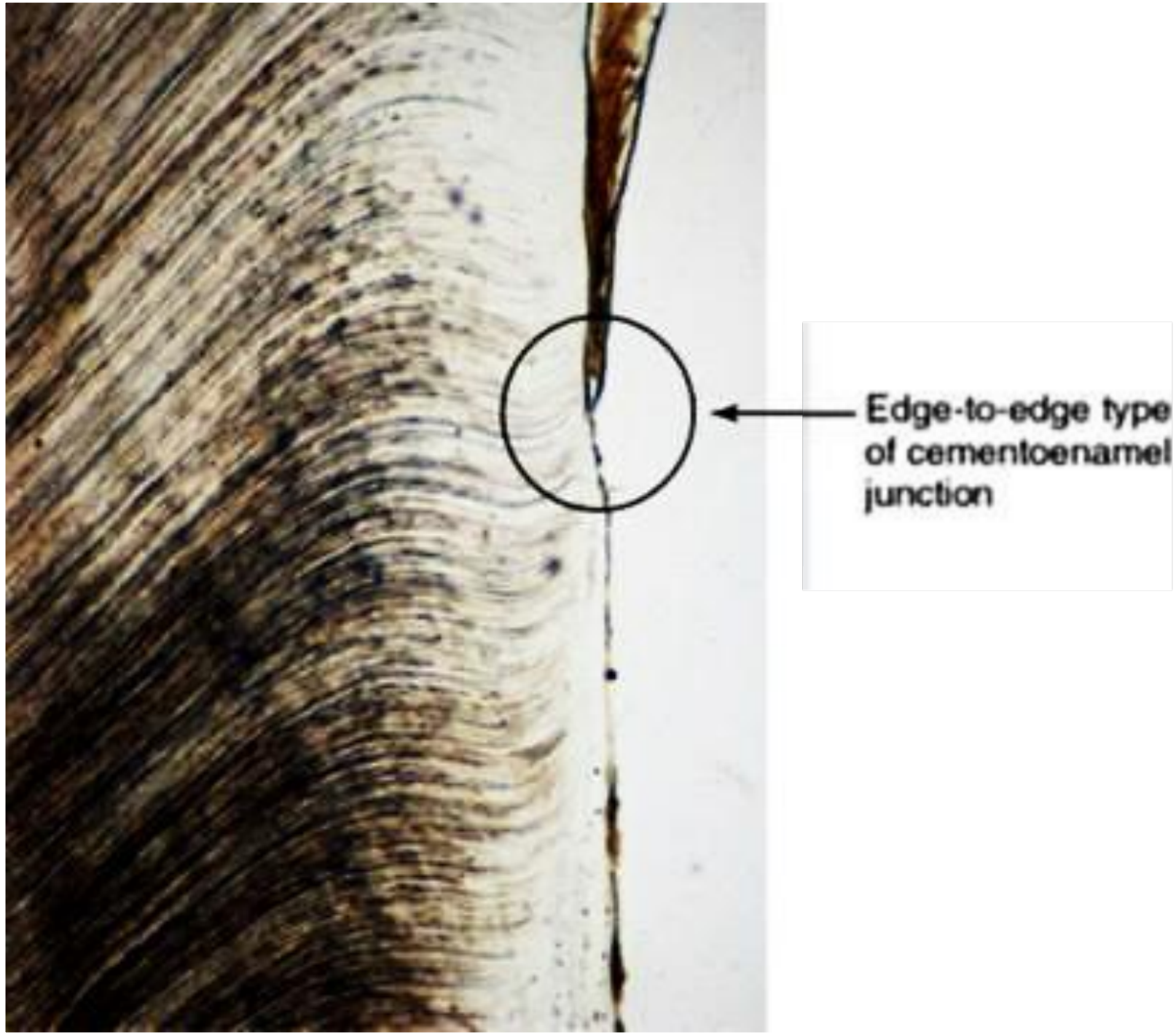
Cementoenamel Junction

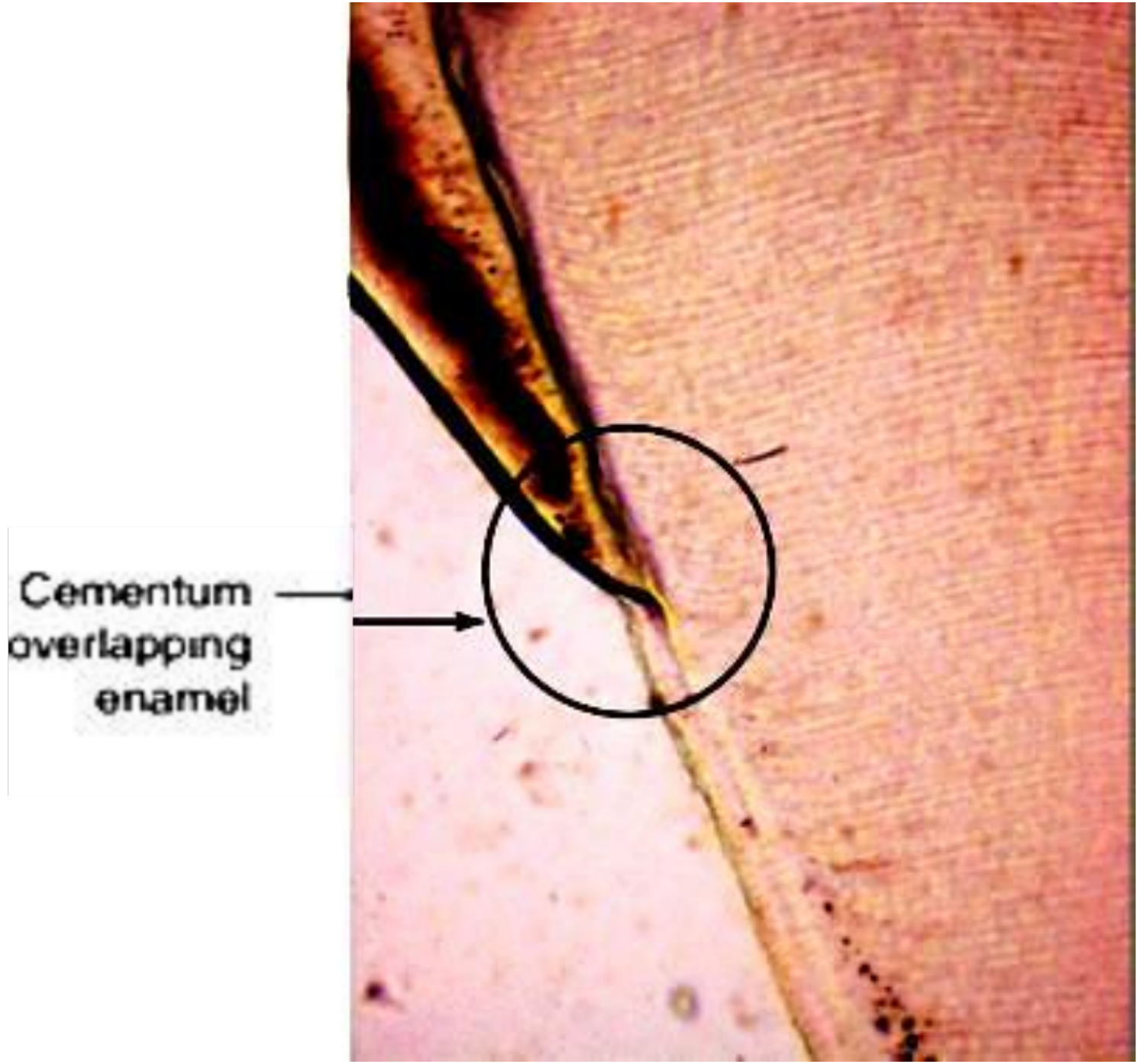

Junctional epithelium
Enamel space
Cementum
Dentin
Cementum overlaps enamel 60%

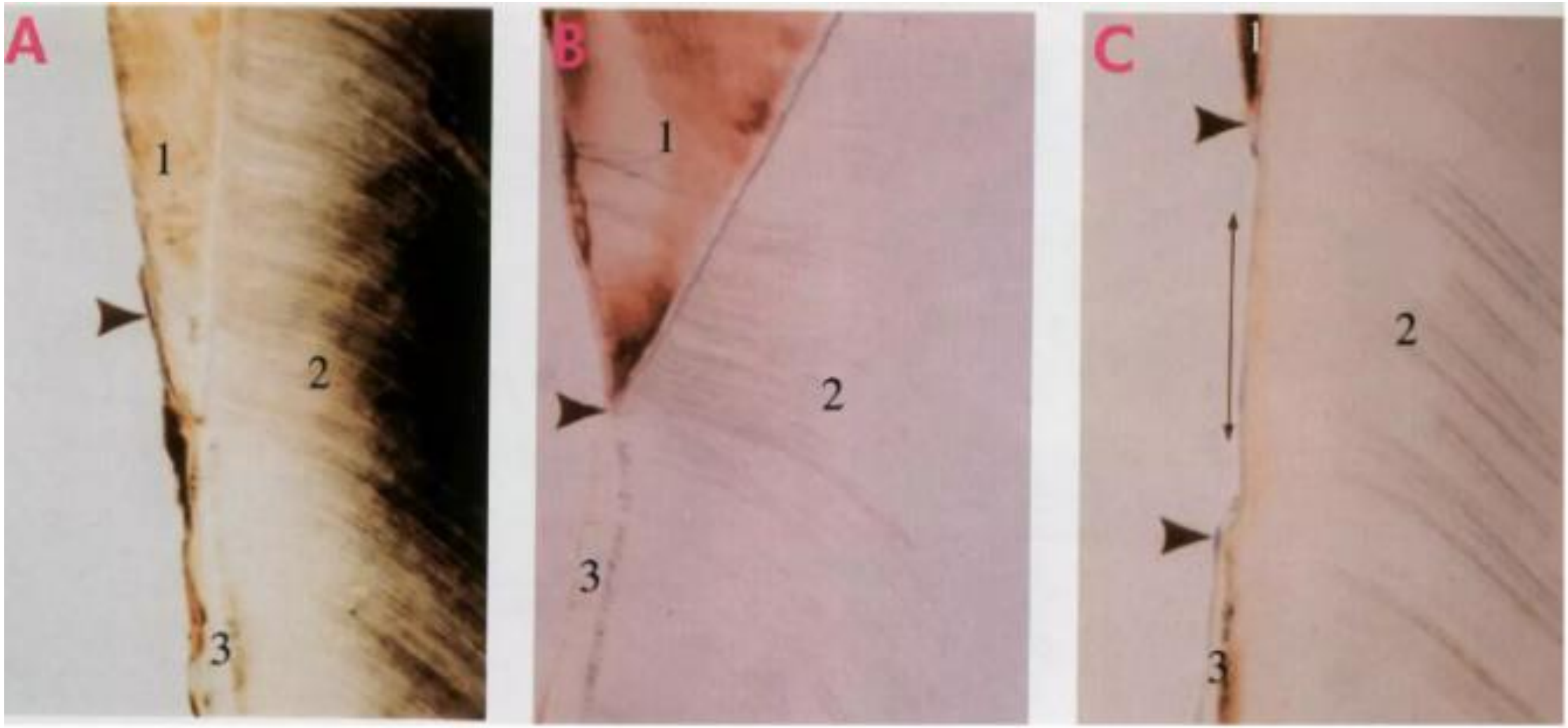

Enamel
Dentin
Cementum
Edge to edge 30%


Enamel
Dentin
Cementum
Cementum do not meet enamel 10%


Gap type of
cementoenamel
"junction"


Edge-to-edge type
of cementoenamel
junction


Cementum
overlapping
enamel

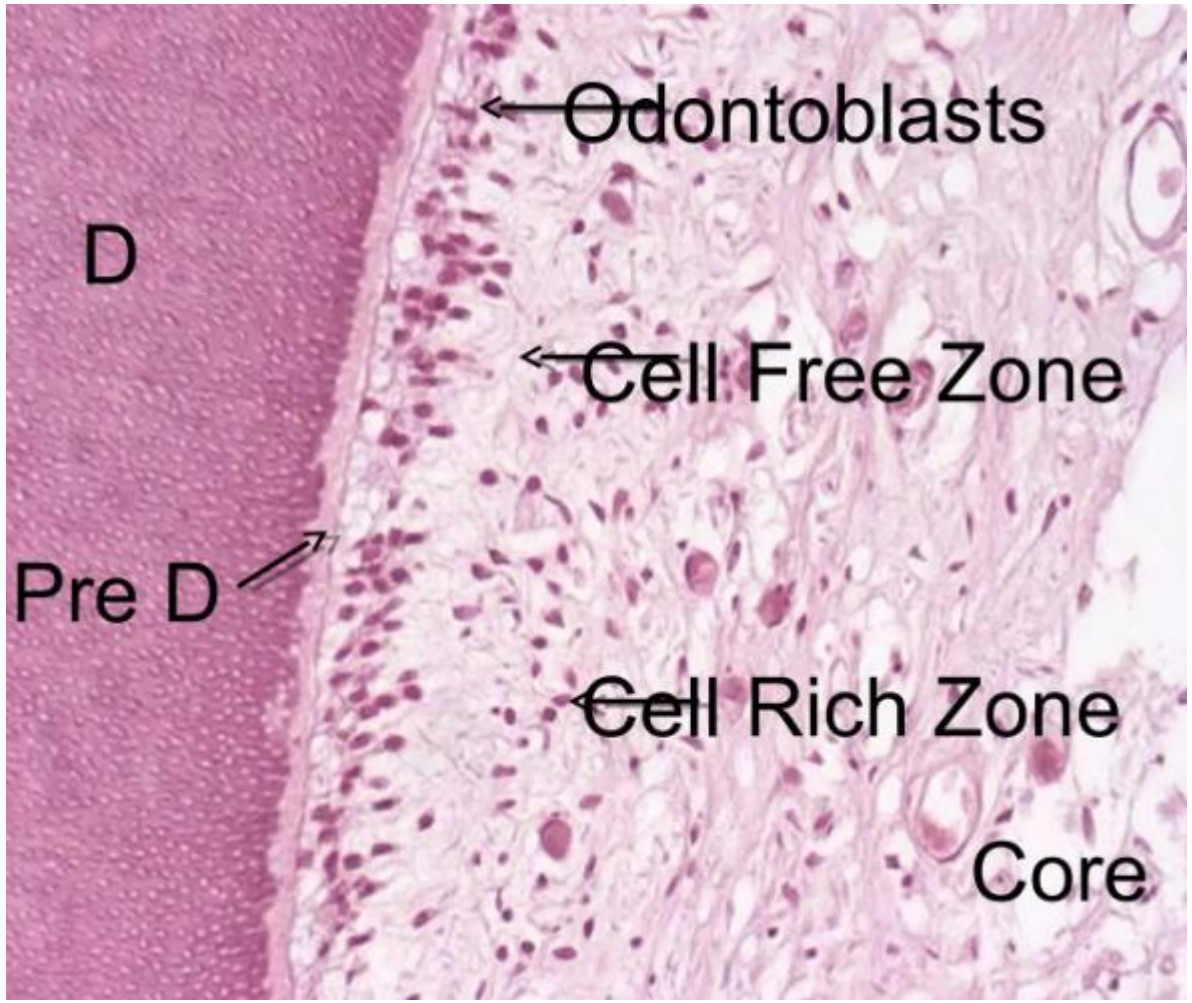


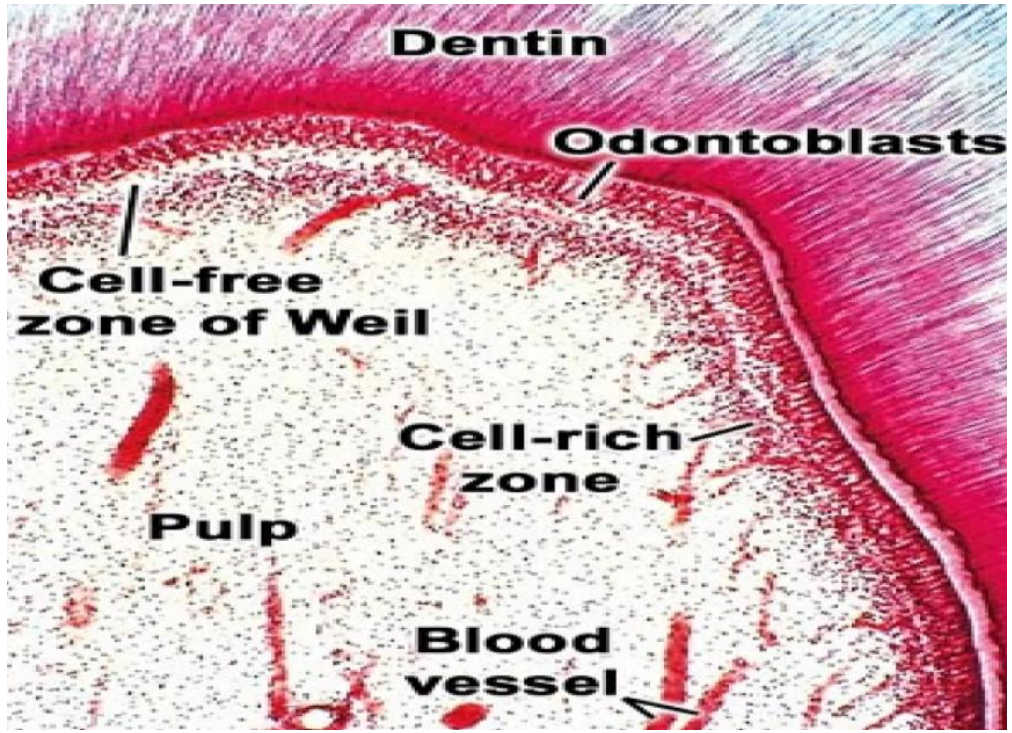
overlapping

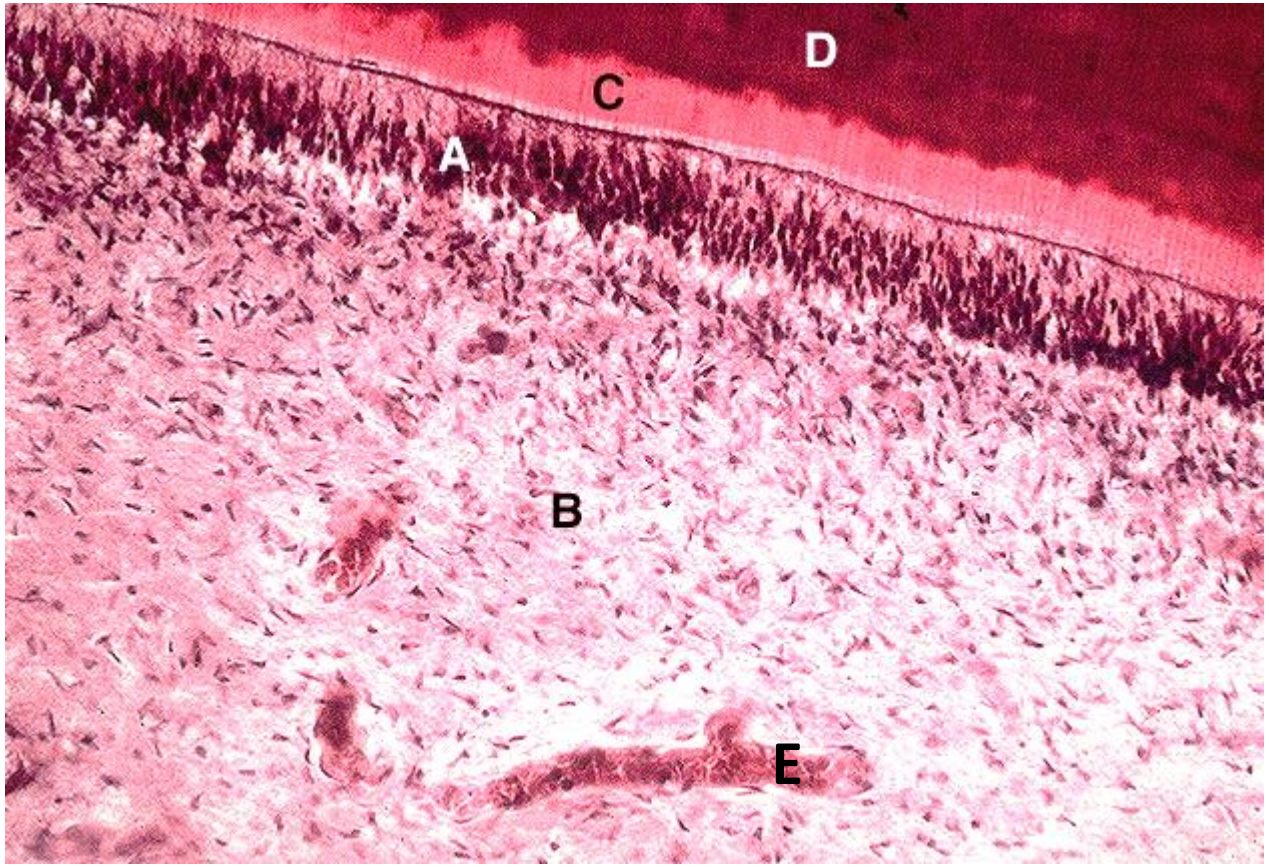
Edge to edge

Gap

Dental Pulp

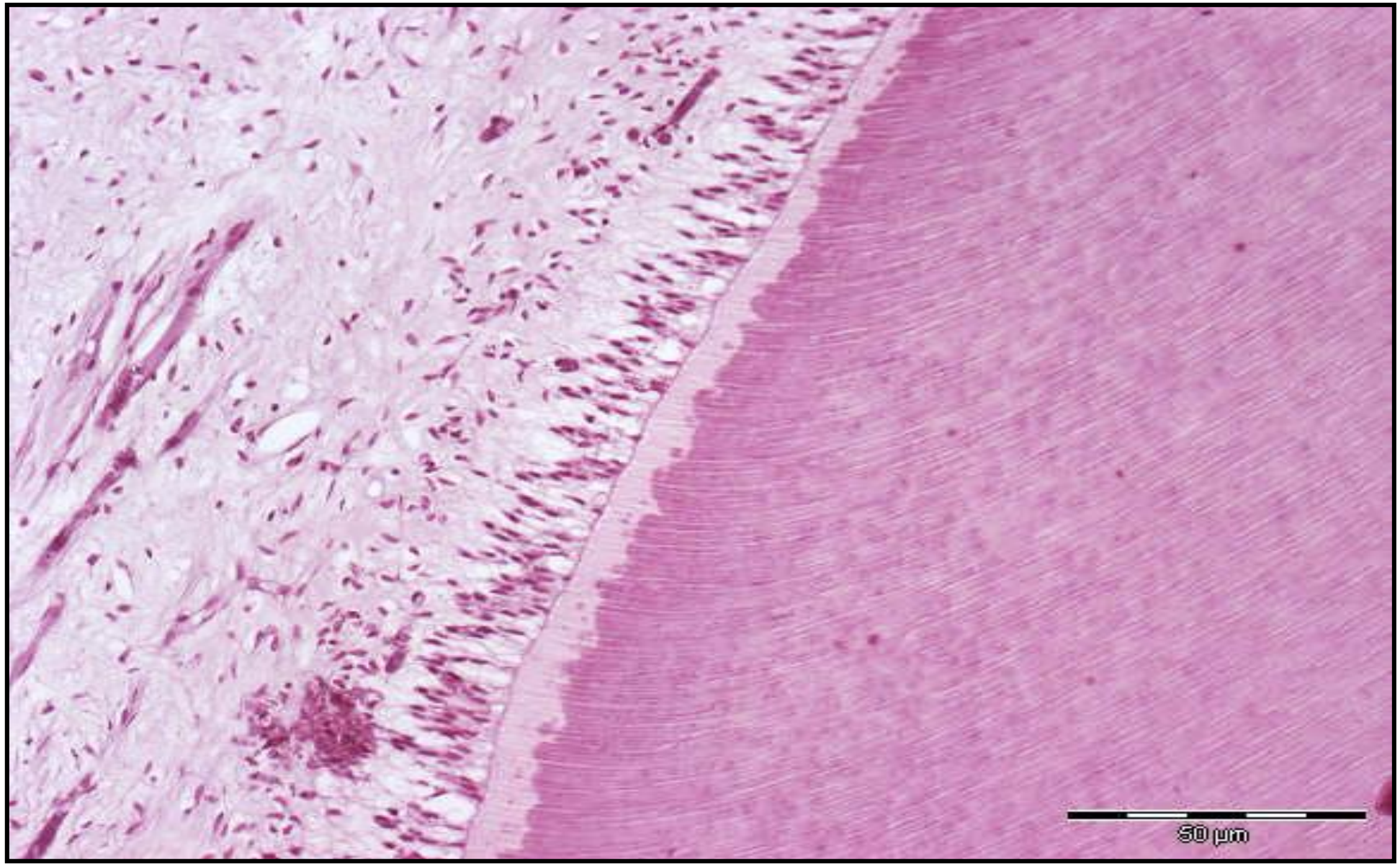

Odontoblasts
D
Cell Free Zone
Pre D
Cell Rich Zone
Core

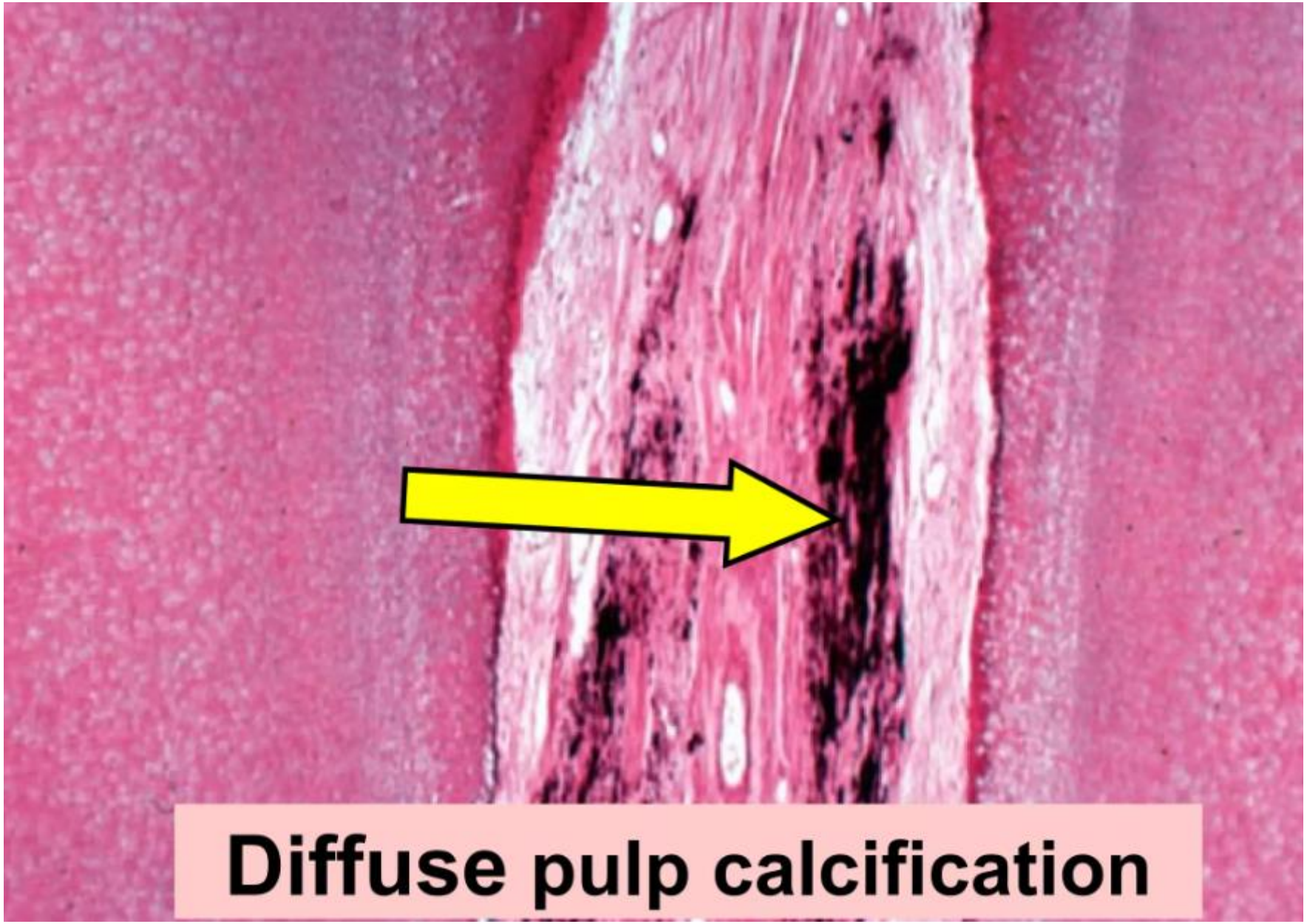

Dentin
Odontoblasts
Cell-free
zone of Weil
Cell-rich
zone
Pulp
Blood
vessel

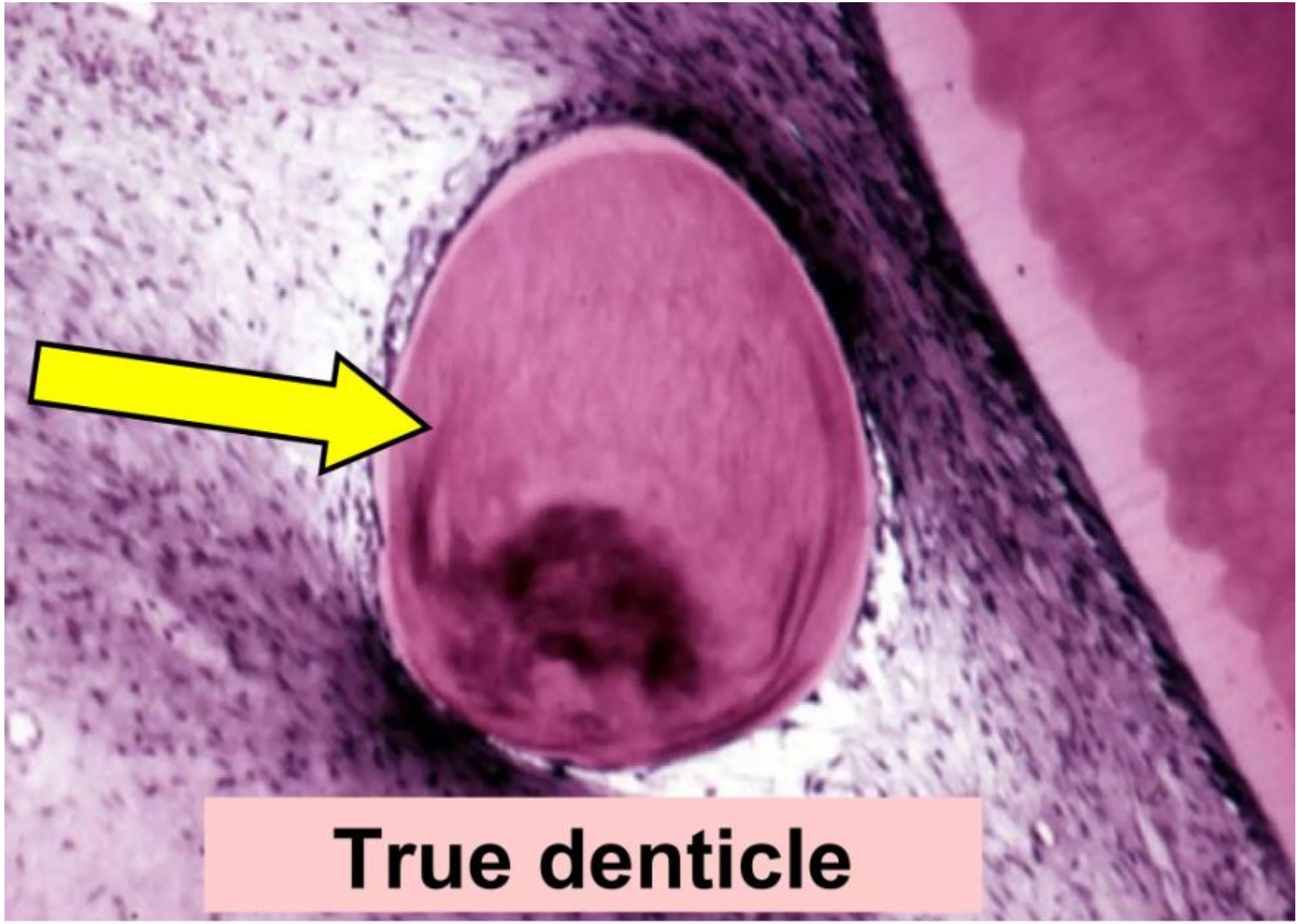


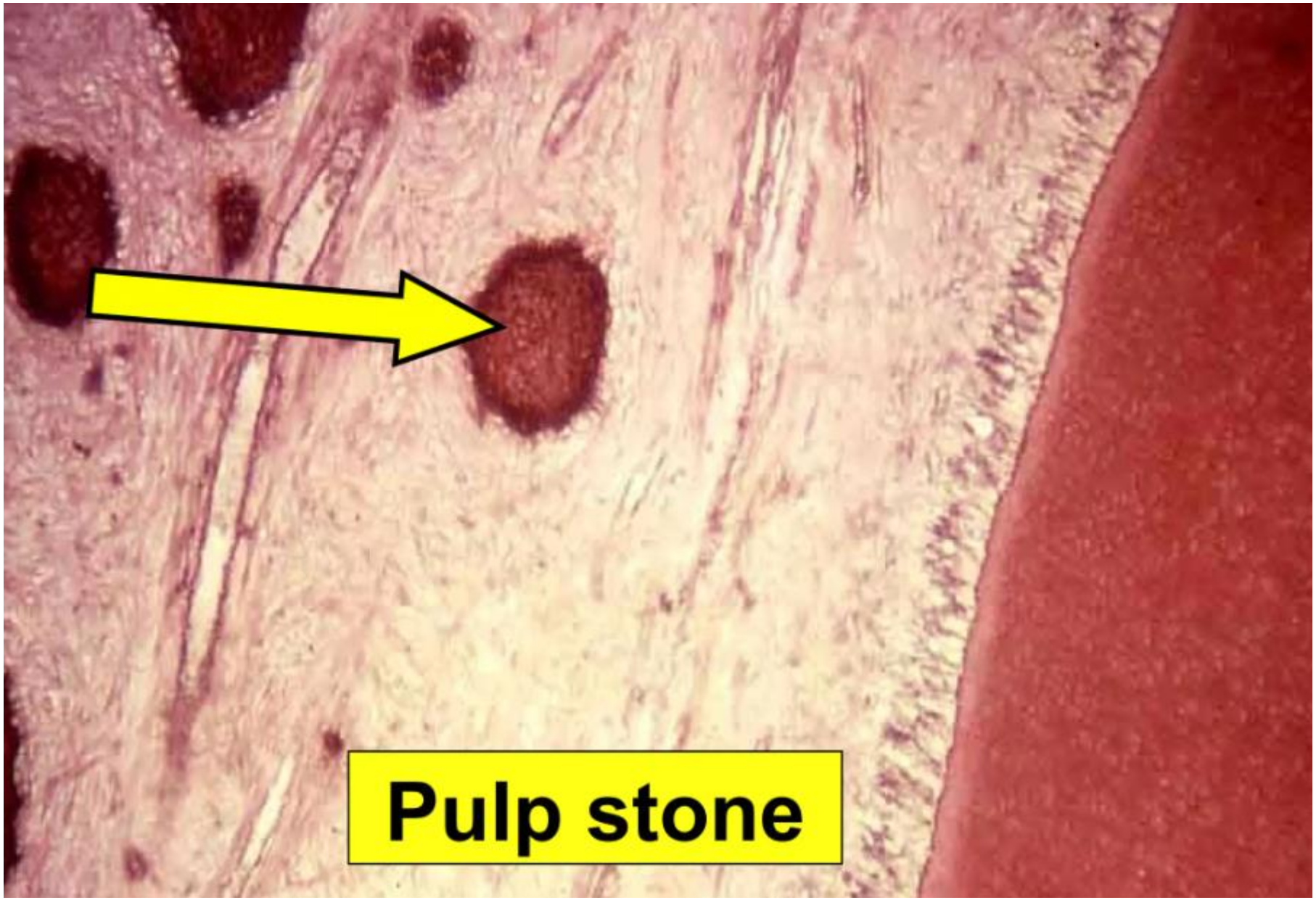
A - odontoblasts
B - pulp
C - predentin
D – dentin
E-blood vessel


1 mm


50 µm


Diffuse pulp calcification


True denticle


Pulp stone