



LUCRAREA PRACTICA NR 9

TESUTUL CARTILAGINOS

CARACTERISTICI

Celule tesutului cartilaginos sunt specializate în producerea fibrelor conjunctive și a substanței fundamentale.

Condroblastele- celule tinere cu citoplasma **bazofila**, nucleu voluminos, sintetizează matricea conjunctivă specifică tesutului cartilaginos și se multiplică prin diviziuni mitotice.

Condrocitele- celule mature (în repaus funcțional), citoplasma **acidofila**, prezintă rare diviziuni mitotice, se pot transforma în condroblaste.

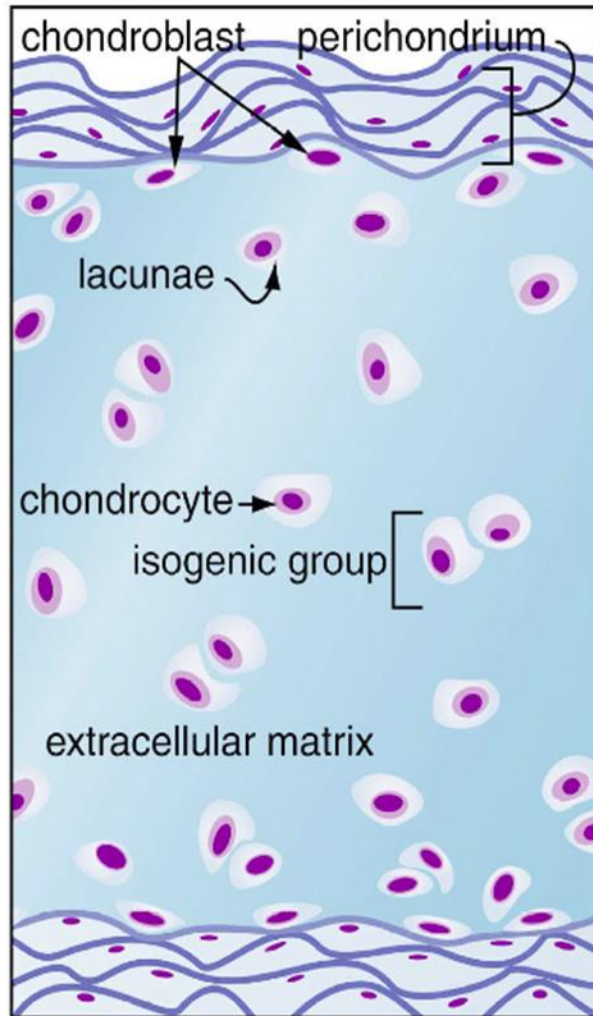
Matricea extracelulară- fibre conjunctive (de colagen și elastice) și substanță fundamentală.

Este acoperit de **pericondru** (excepție fibrocartilajul și cartilajele articulare).

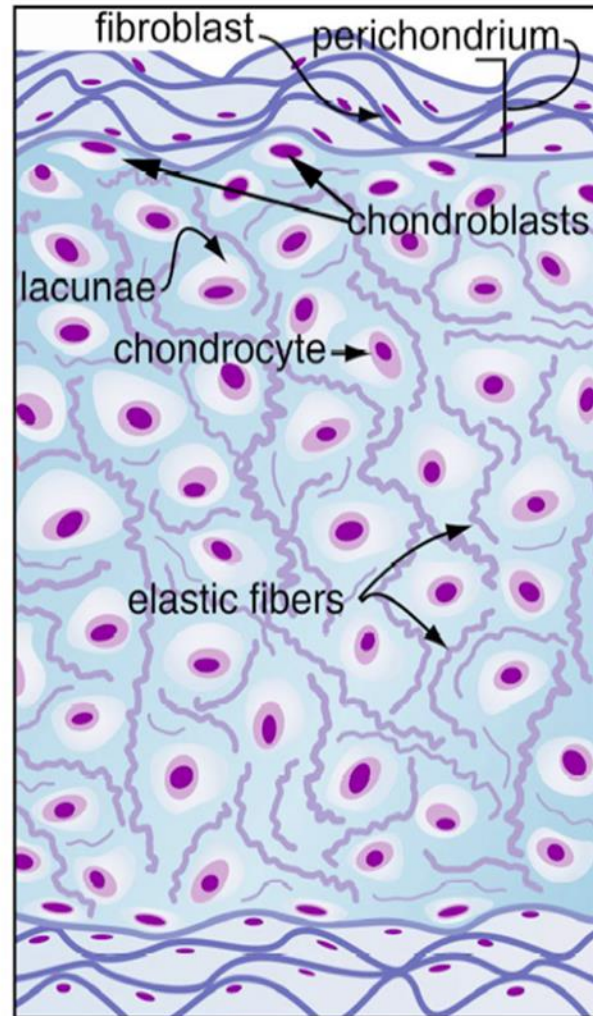
Nu este nici **inervat** și nici **vascularizat** (nutriția se realizează prin difuziune de la vasele de sânge de la nivelul pericondrului).

VARIETATI ALE TESUTULUI CONJUNCTIV

Hyaline Cartilage

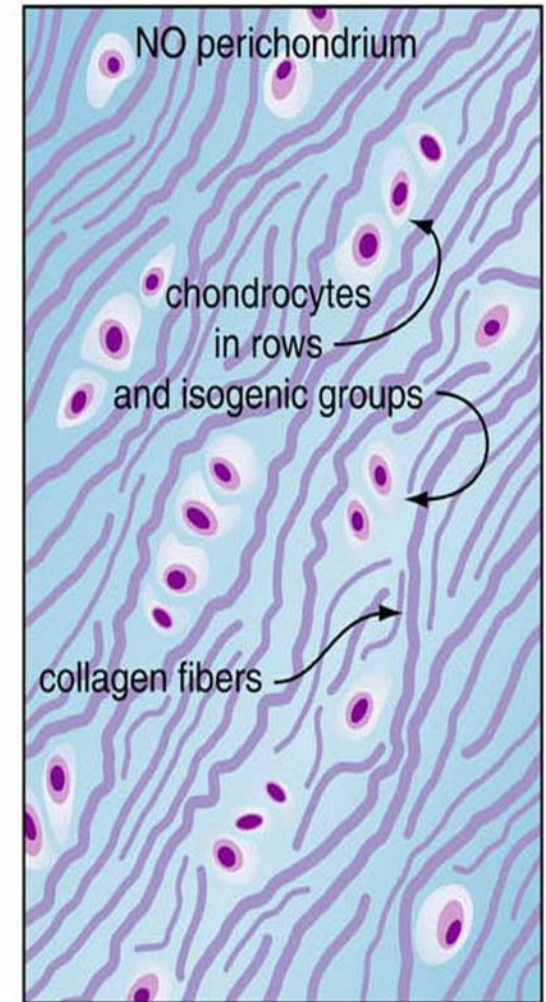


Elastic Cartilage



Copyright R. Nims and S.C. Kempf 12/2006

Fibrocartilage



© R. Nims/S.C. Kempf 12/2000

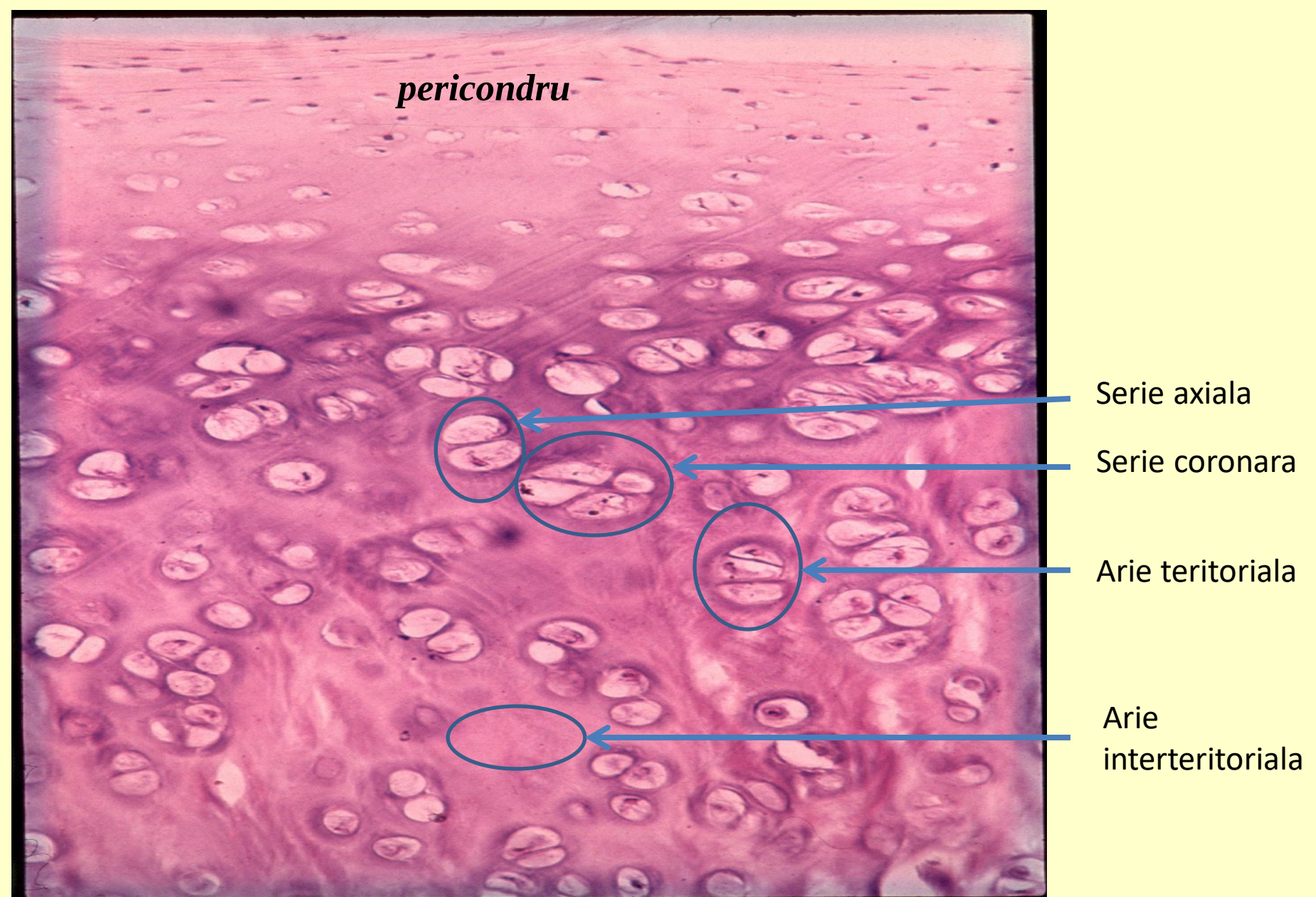
CARTILAJUL HIALIN

Cartilajul hialin este varietatea cea mai raspandita, are in componenta sa: celule- **condroblaste** si **condrocite** in lacune dispuse in grupuri izogene (axiale si coronare); **fibre de collagen** (predomina collagenul de tip II); **substanta fundamentala bazofila** (aria teritoriala) sau **acidofila** (aria interteritoriala).

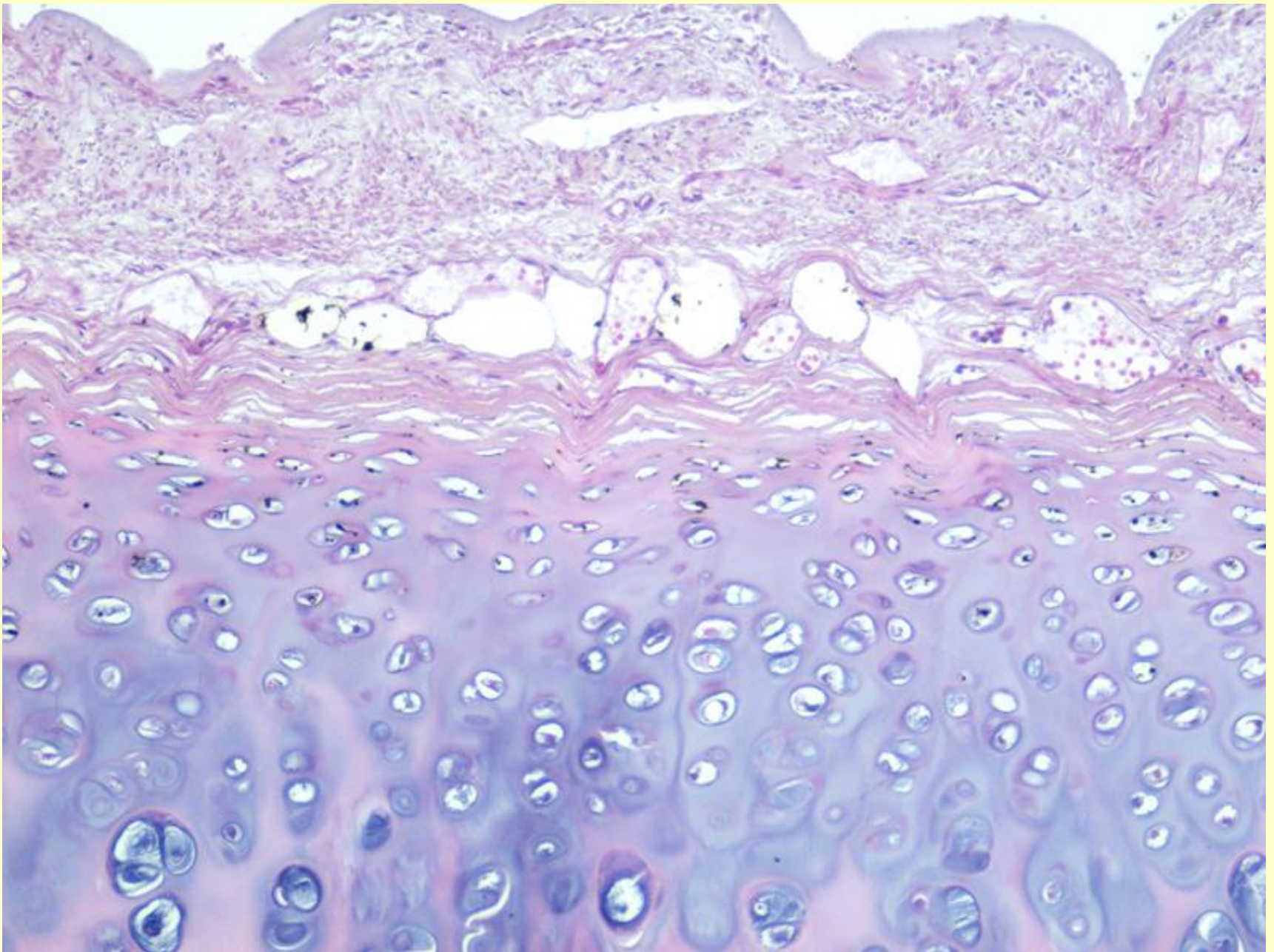


FIG. 3. NEWLY FORMED HYALINE CARTILAGE OF THE TRACHEA. Stain: hematoxylin-eosin. 120X.

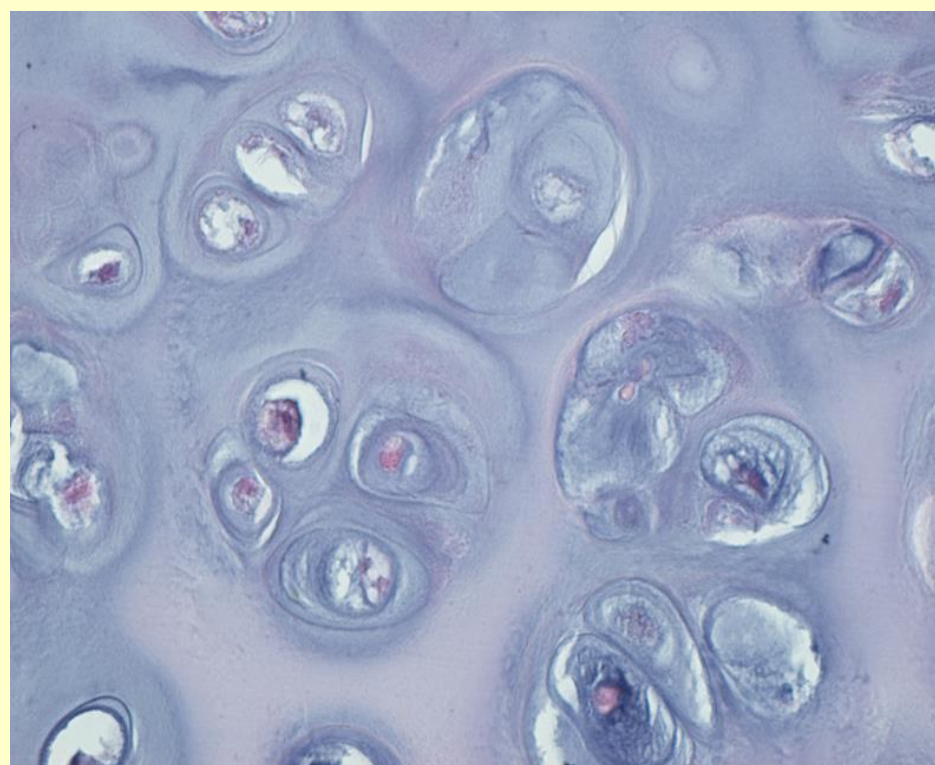
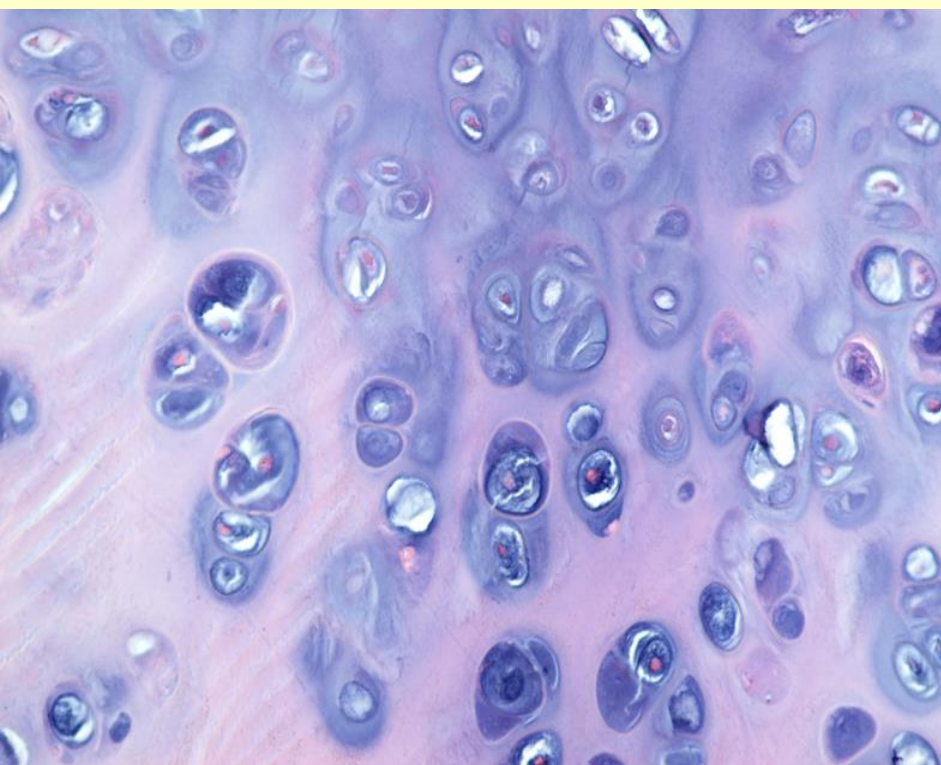
Dupa di Fiore's



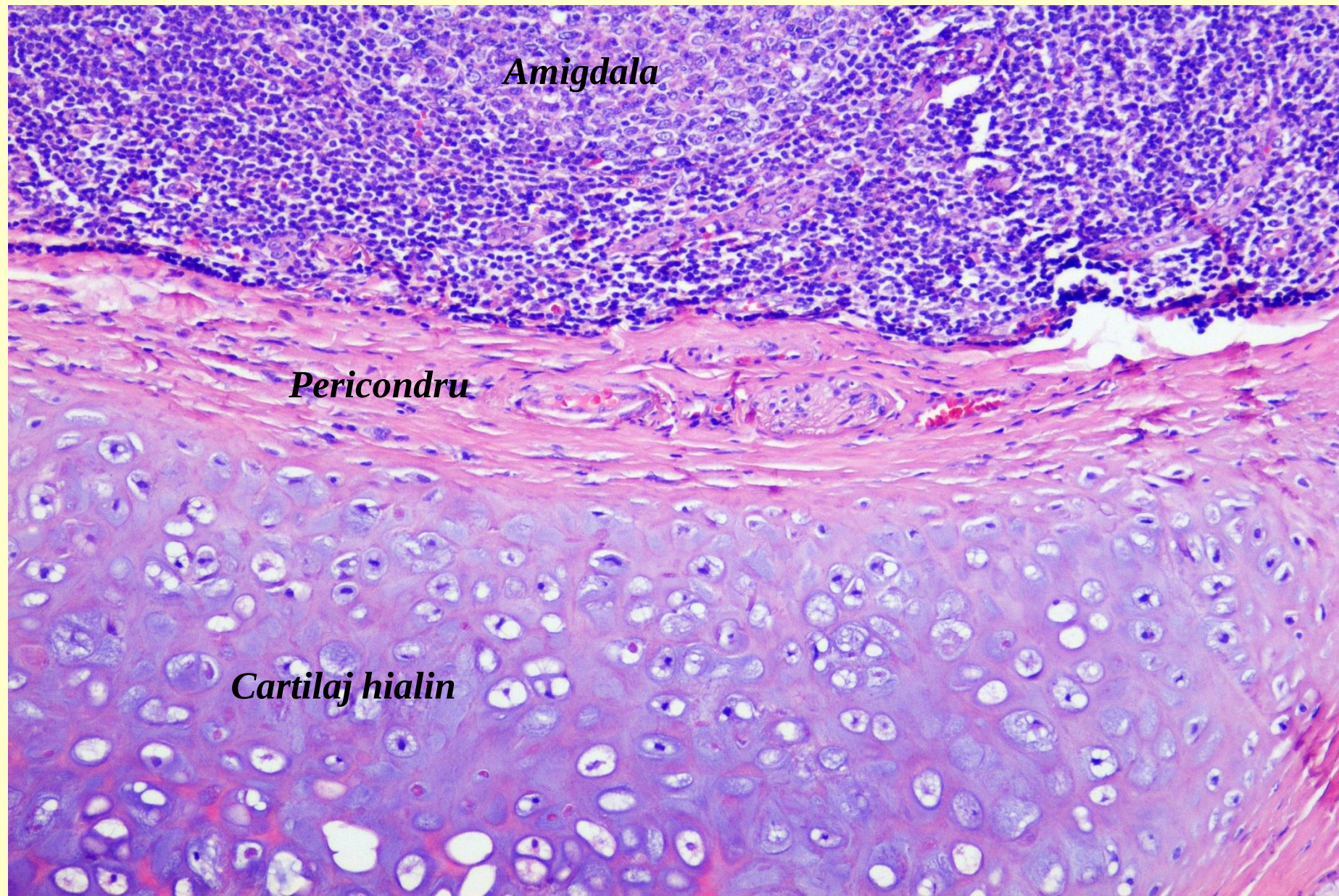
Cartilaj hialin. Coloratie Hematoxilina-Eozina.



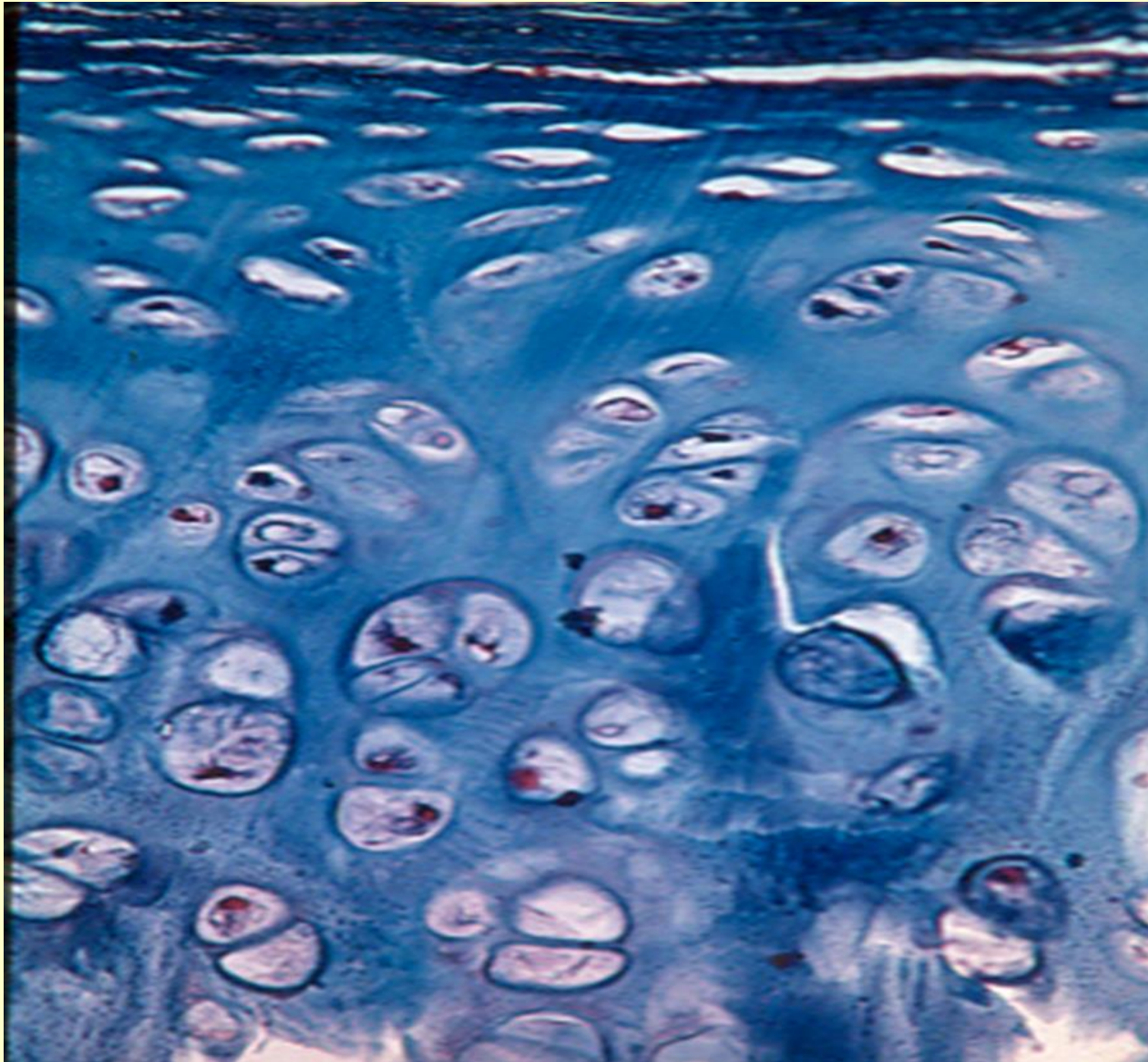
Cartilaj hialin. Pericondru. Coloratie Hematoxilina-Eozina.



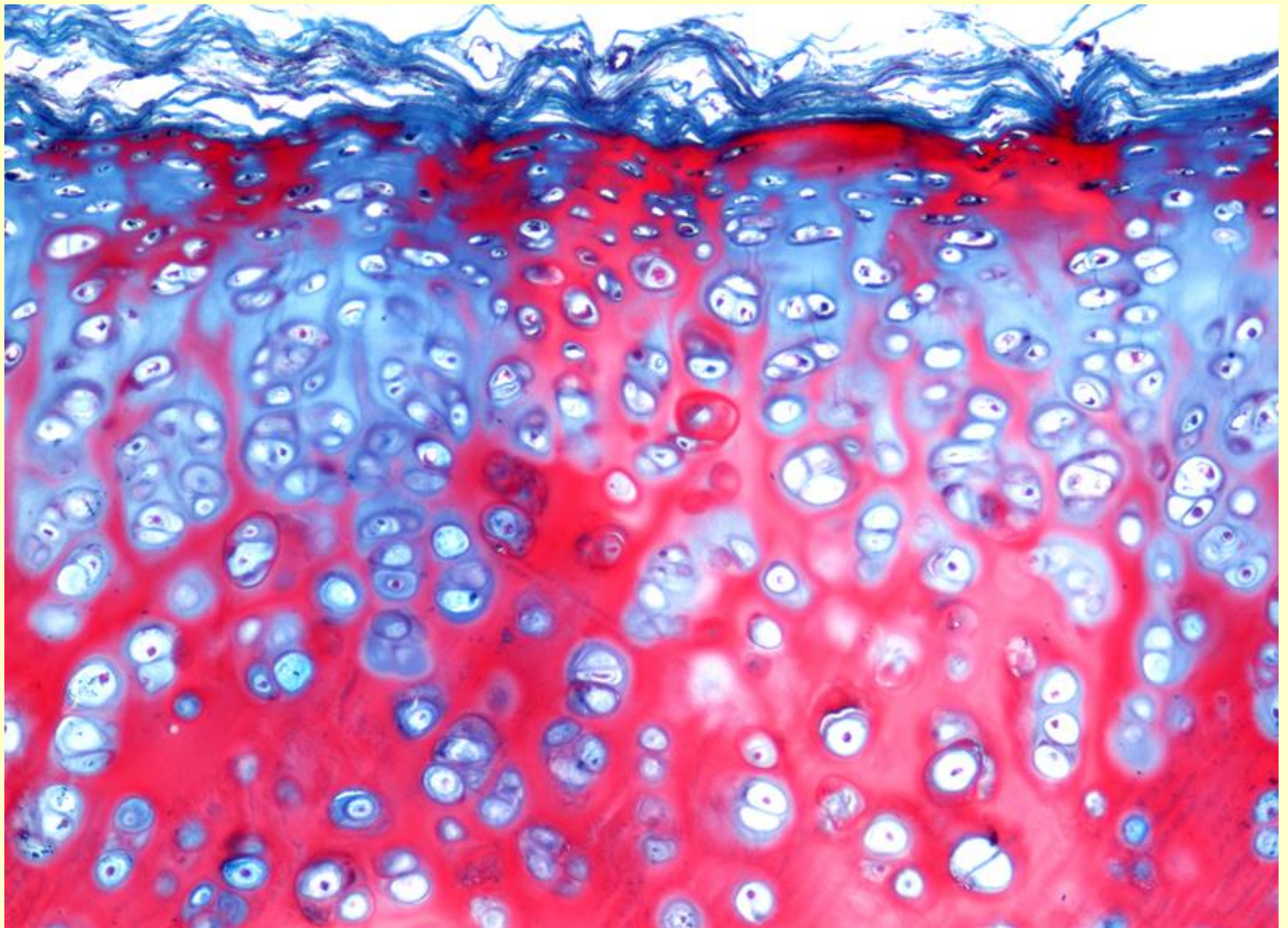
Cartilaj hialin. Coloratie Hematoxilina-Eozina.



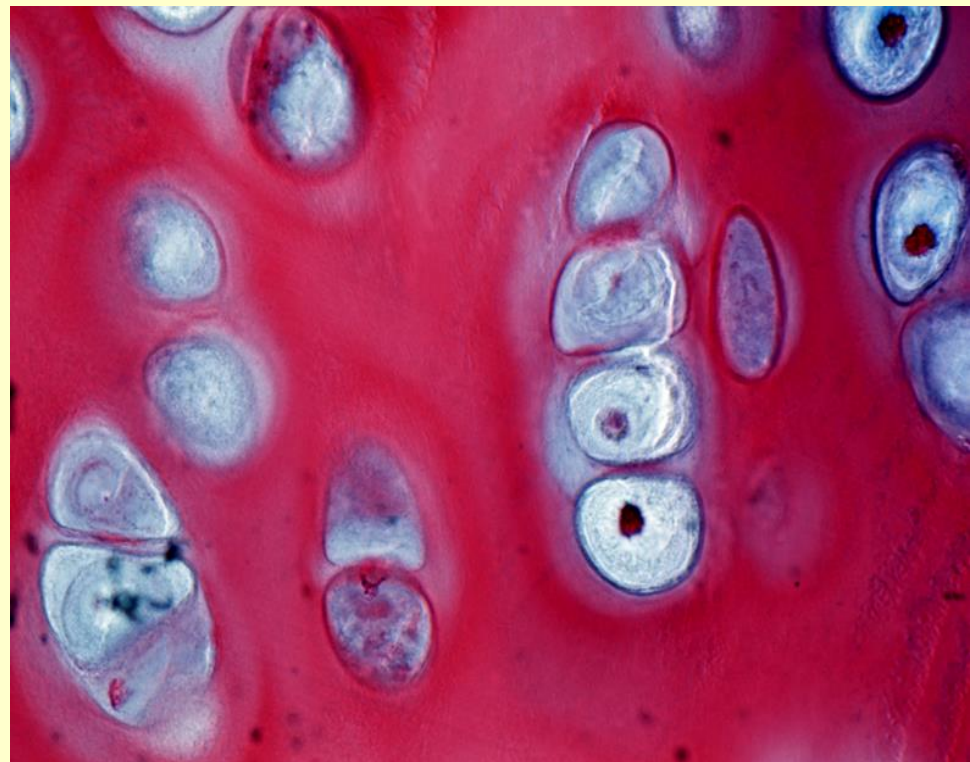
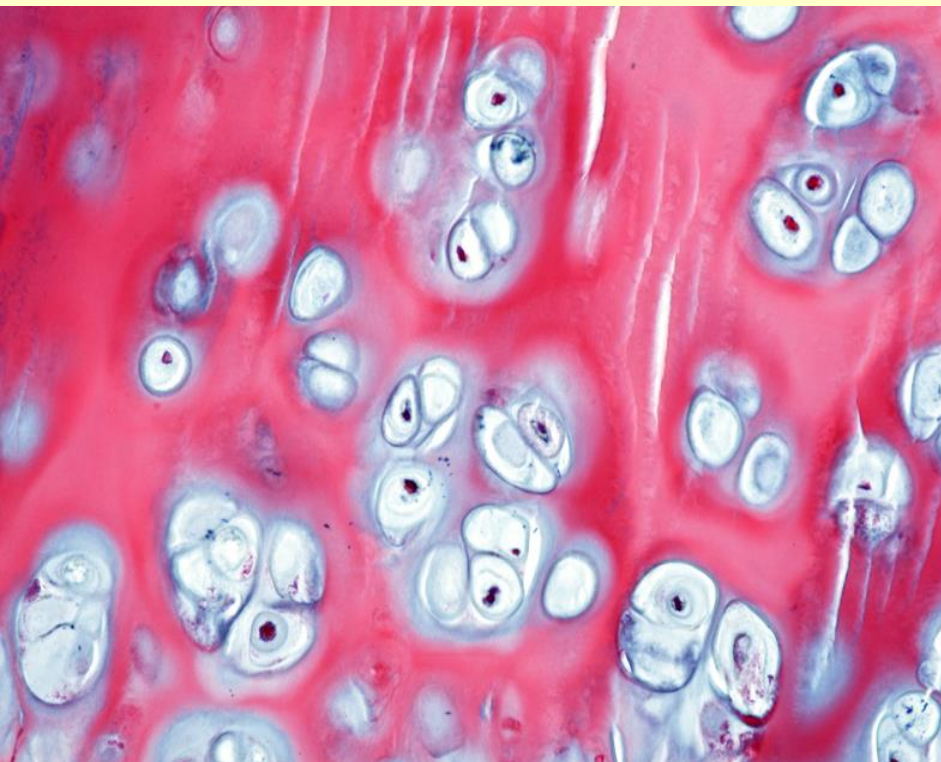
Condrogeneza ectopica in amigdala. Coloratie Hematoxilina-Eozina



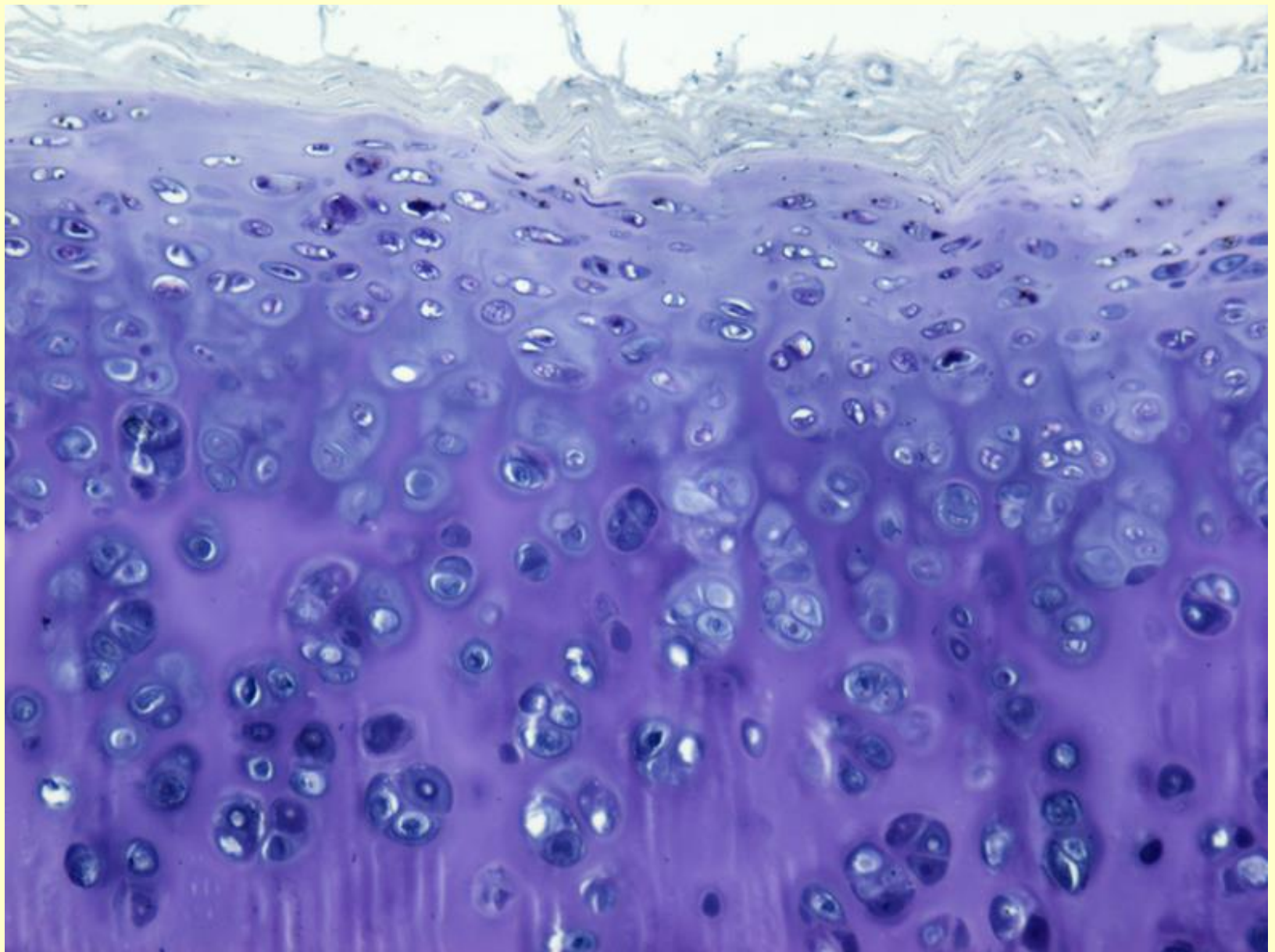
Cartilaj hialin. Coloratie Tricromic Masson



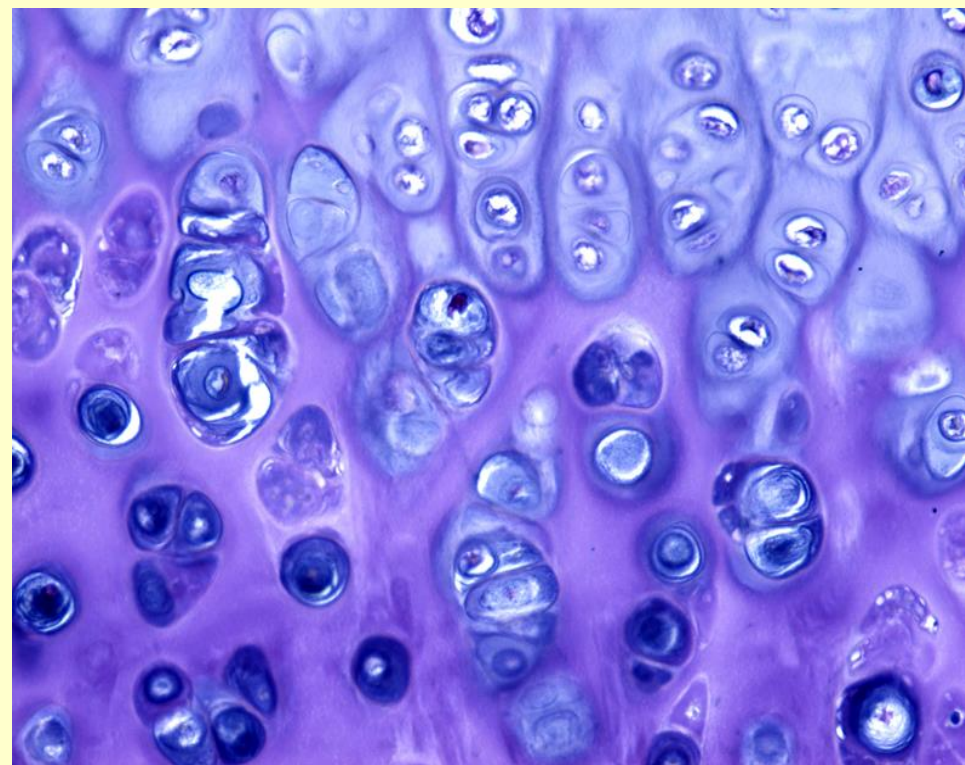
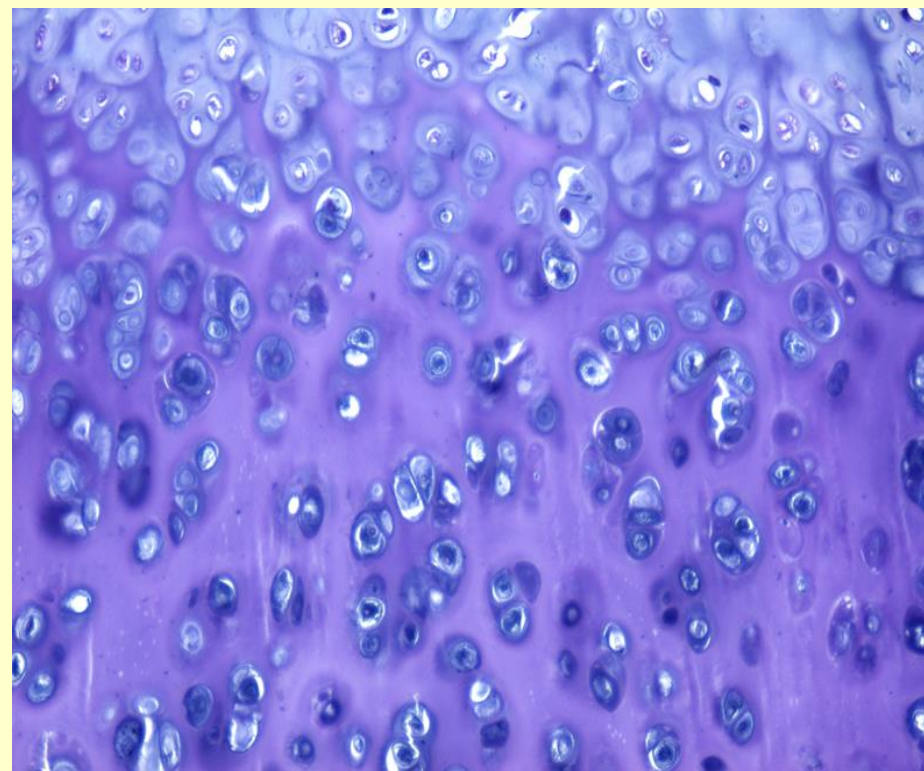
Cartilaj hialin. Pericondru. Coloratie Tricromic Masson



Cartilaj hialin. Serii coronare si axiale. Coloratie Tricromic Masson



Cartilaj hialin. Pericondru. Coloratie PAS- Hematoxilina



Cartilaj hialin. Coloratie PAS- Hematoxilina

Pericondru
fibro-vascular

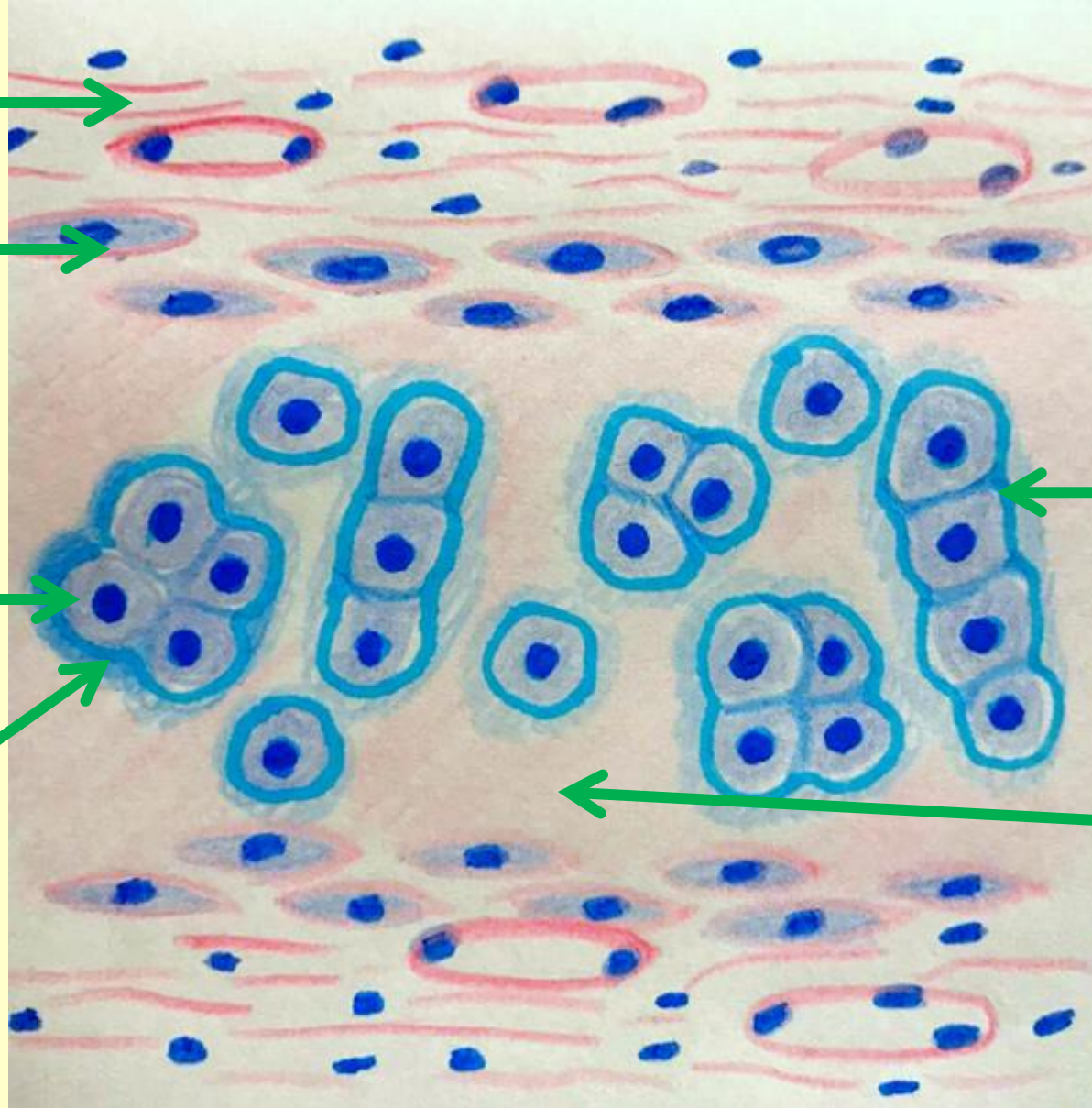
Pericondru
celular
(condroblaste)

Condrocite
(grupe
izogene
coronare)

Matrice
teritoriala

Condrocite
(grupe
izogene
axiale)

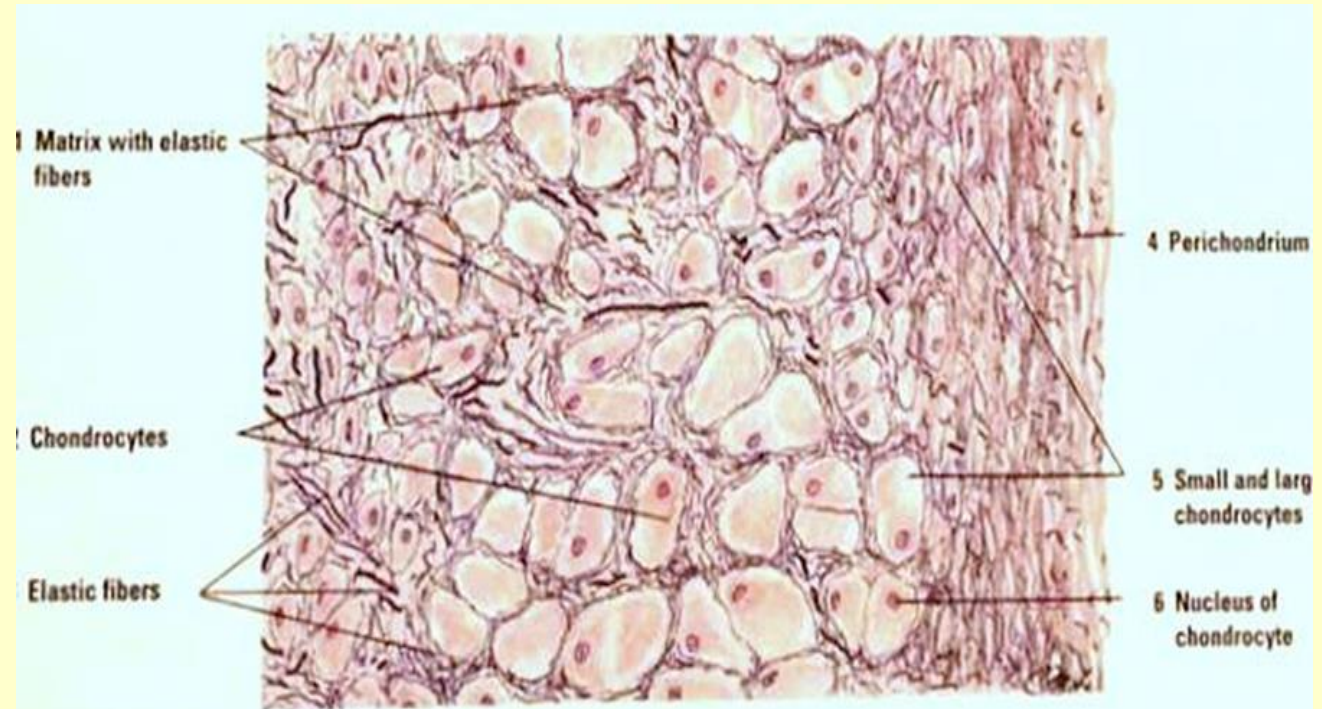
Matrice
interteritoriala



Cartilaj hialin. Pericondru. Coloratie Hematoxilina-Eozina.

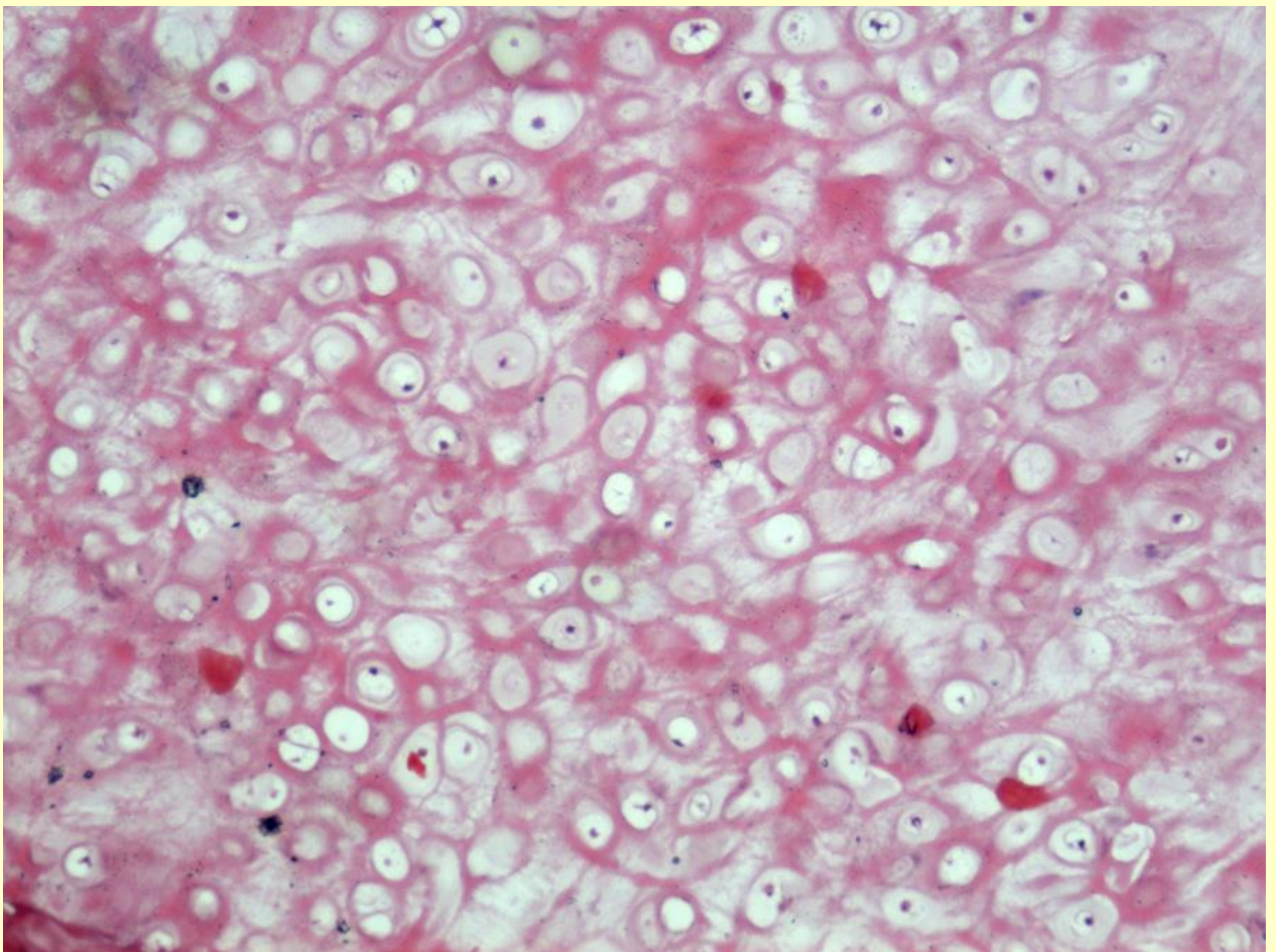
CARTILAJUL ELASTIC

Are in componenta
sa: **celule-**
condroblaste si
condrocite care nu
mai formeaza serii
izogene, fiecare
condroplast contine
o singura celula;
fibre elastice si
substanta
fundamentala.

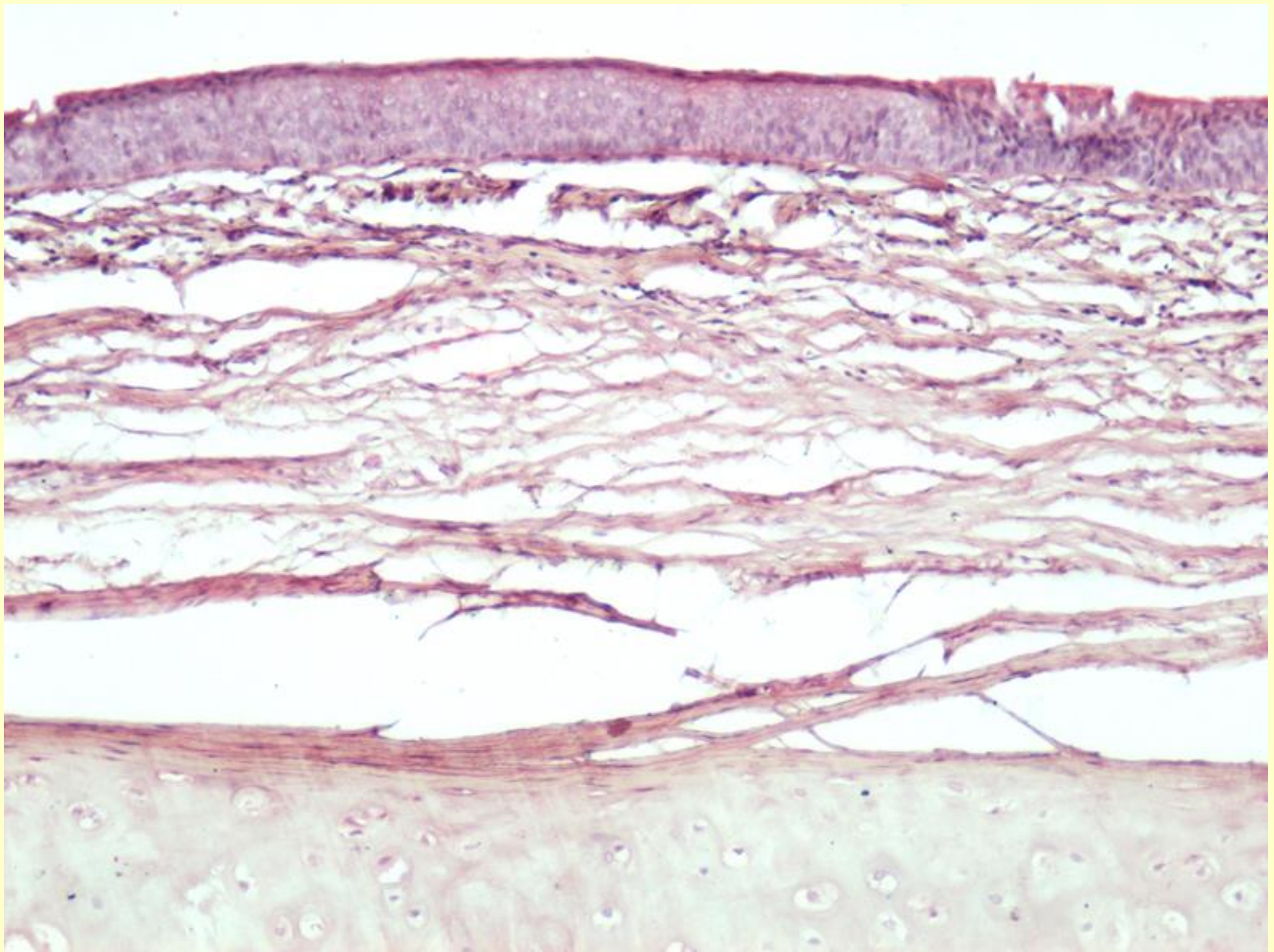


IG. 2. ELASTIC CARTILAGE: EPIGLOTTIS. Stain: hematoxylin-eosin. 320×.

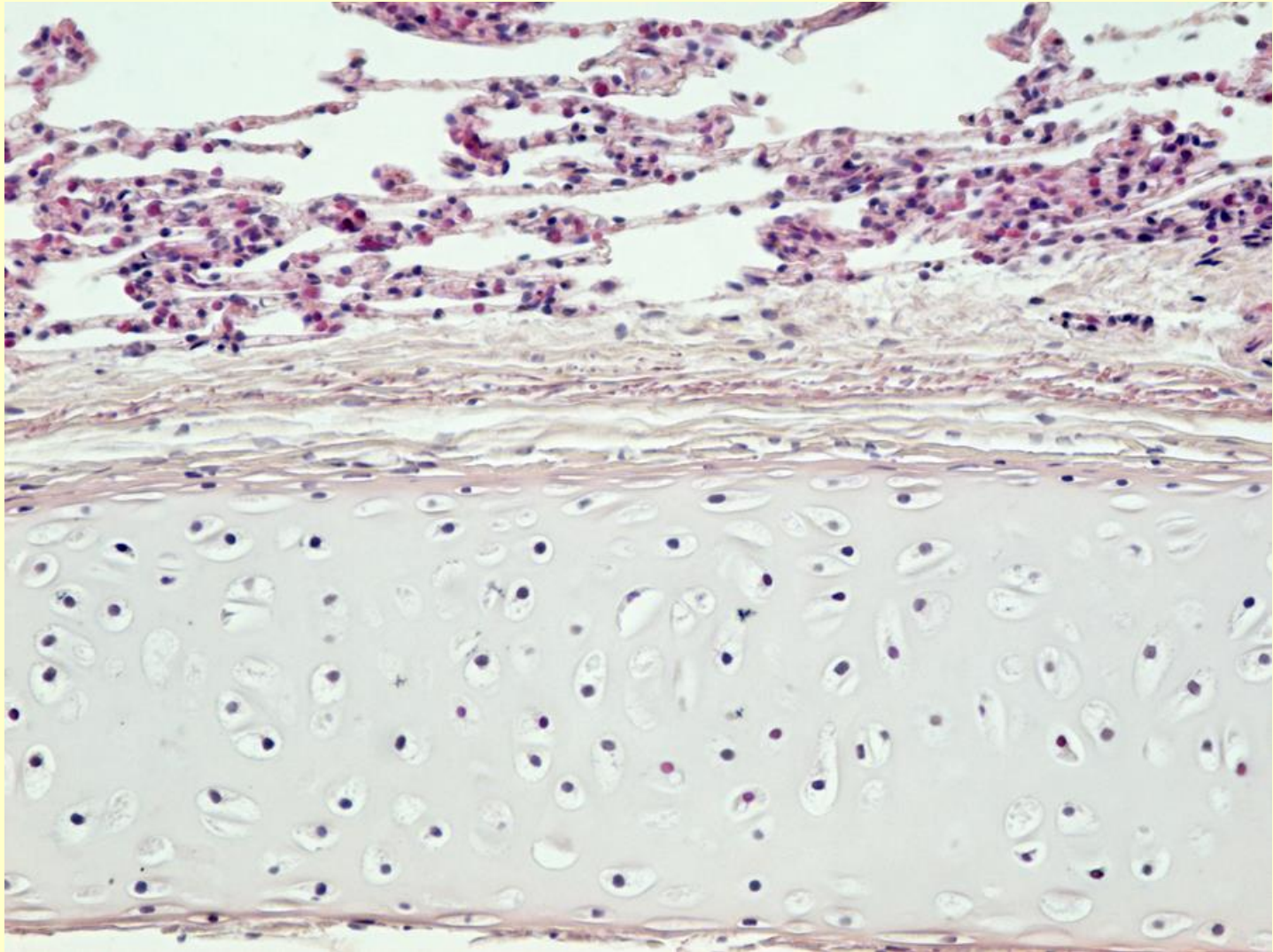
Dupa di Fiore's



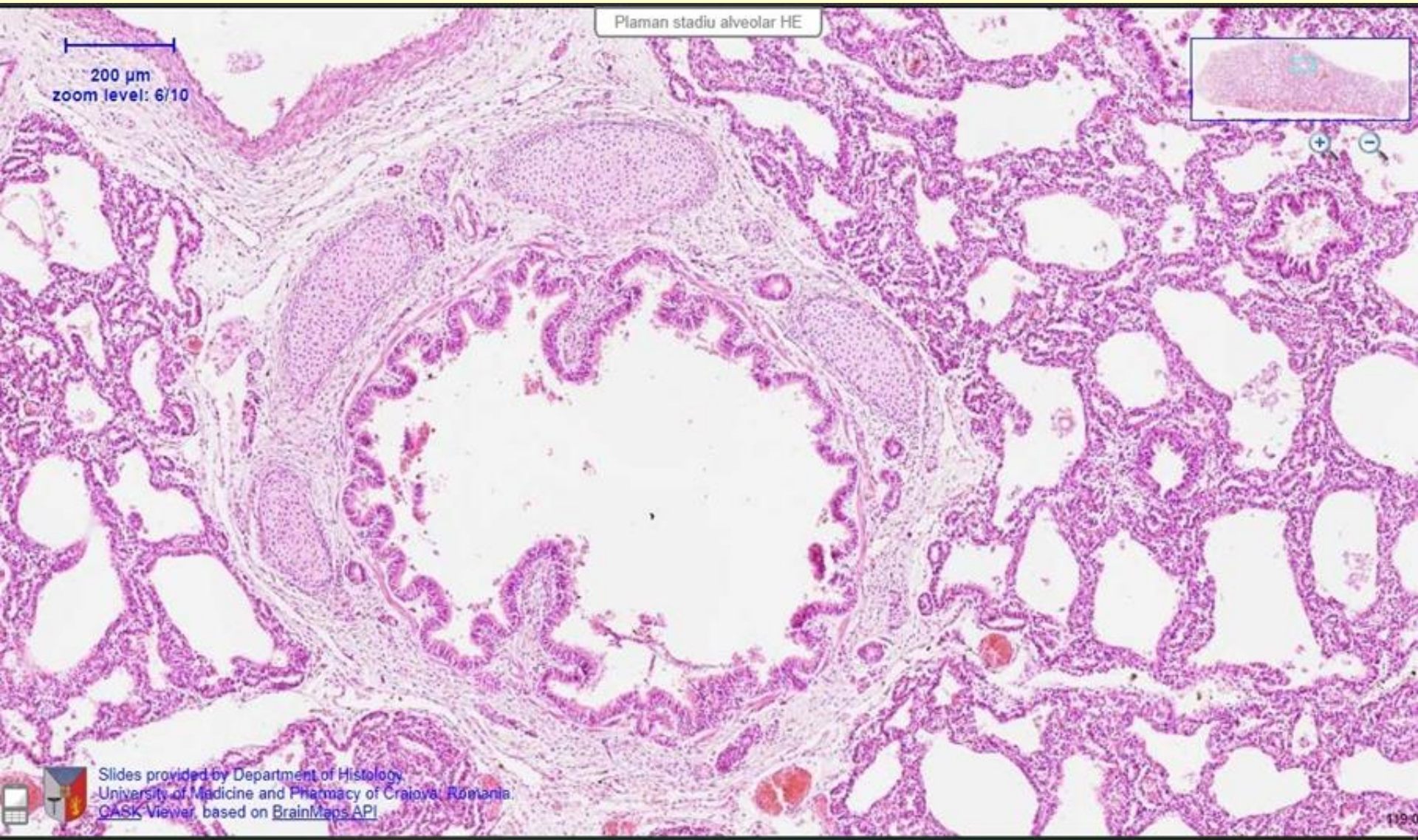
Cartilaj elastic. Coloratie Hematoxlină-Eozină



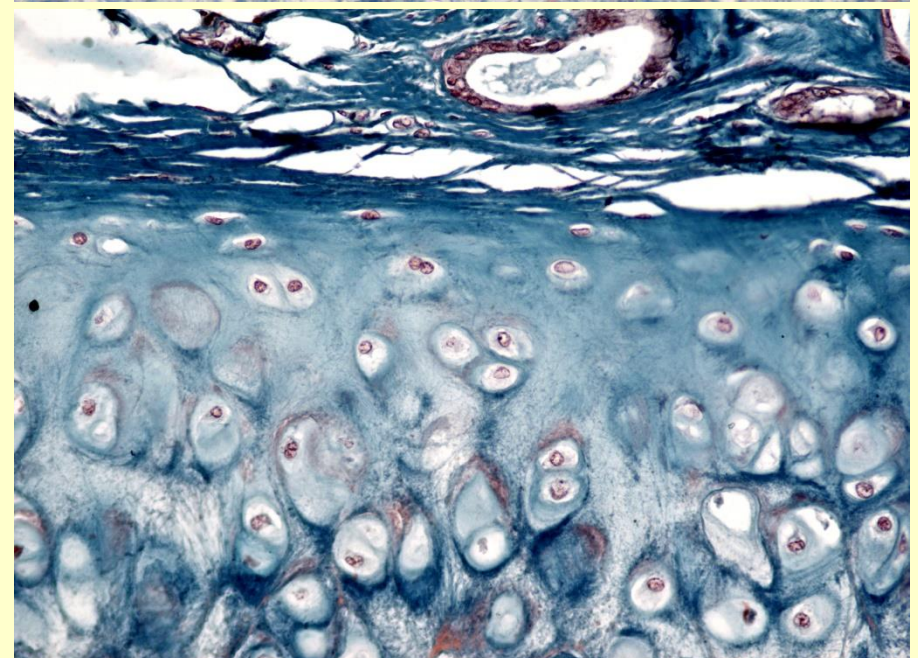
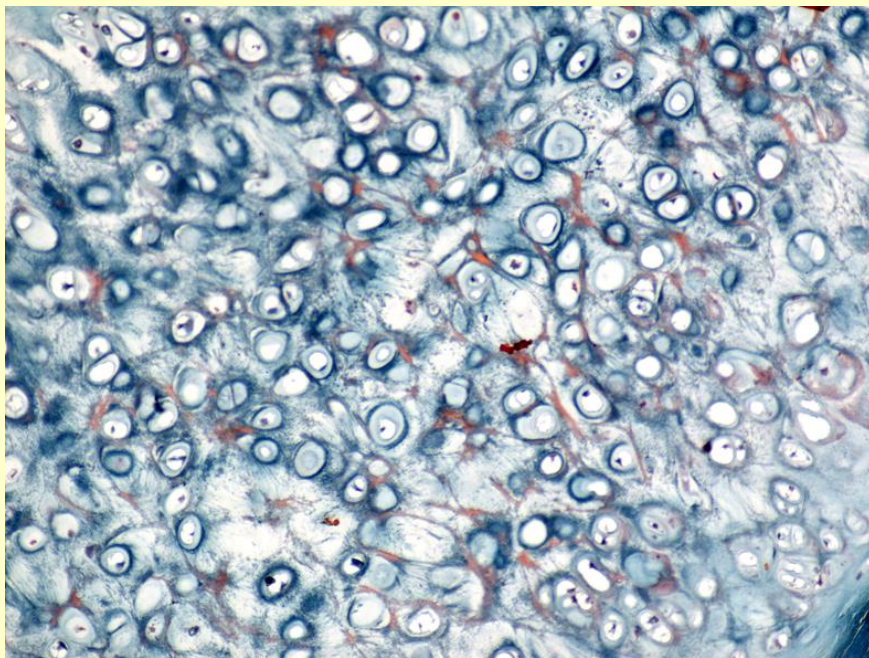
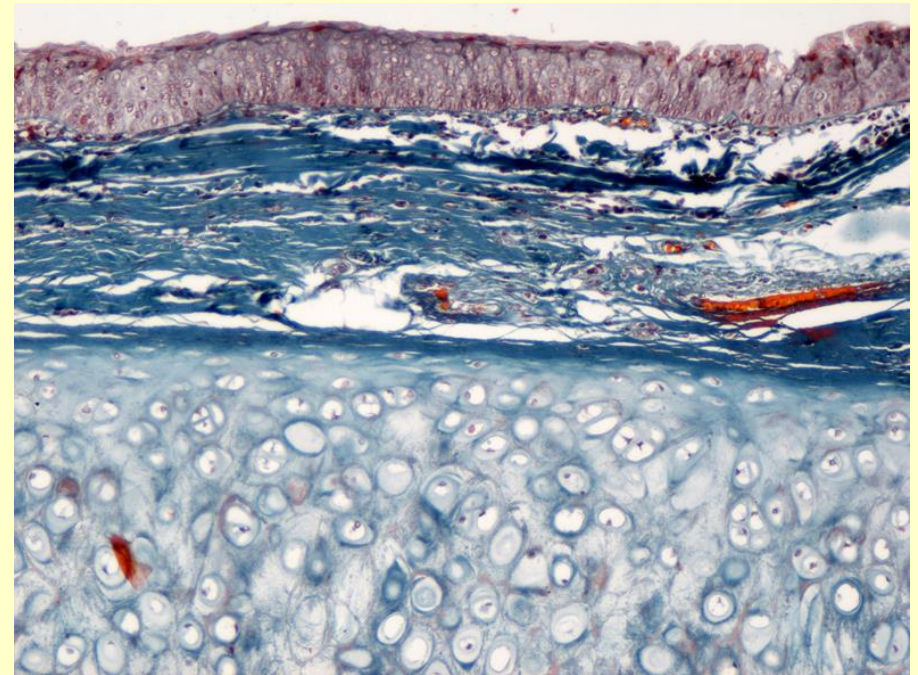
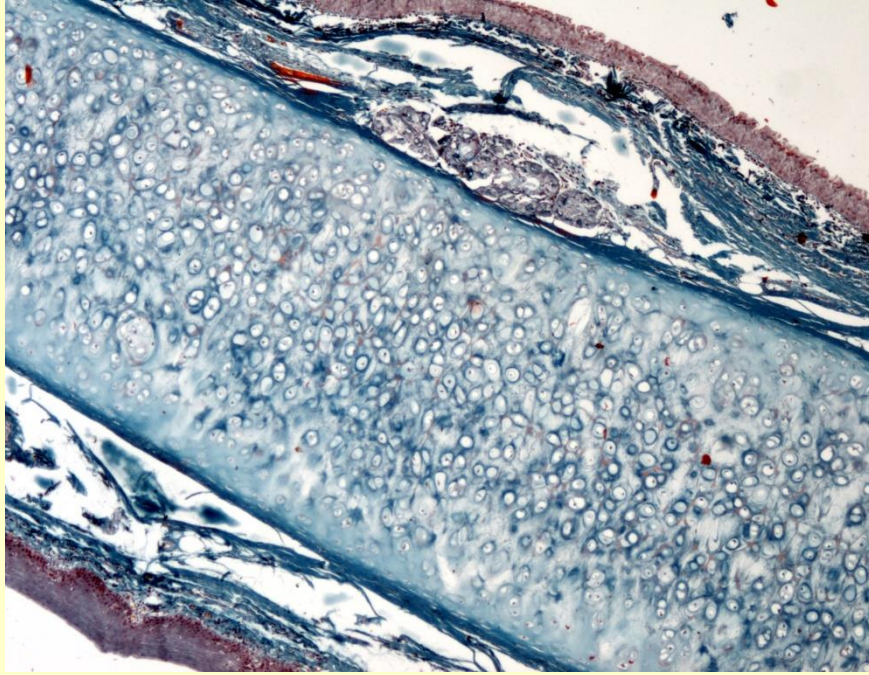
***Cartilaj elastic. Pericondru.
Coloratie Hematoxlină-Eozină***



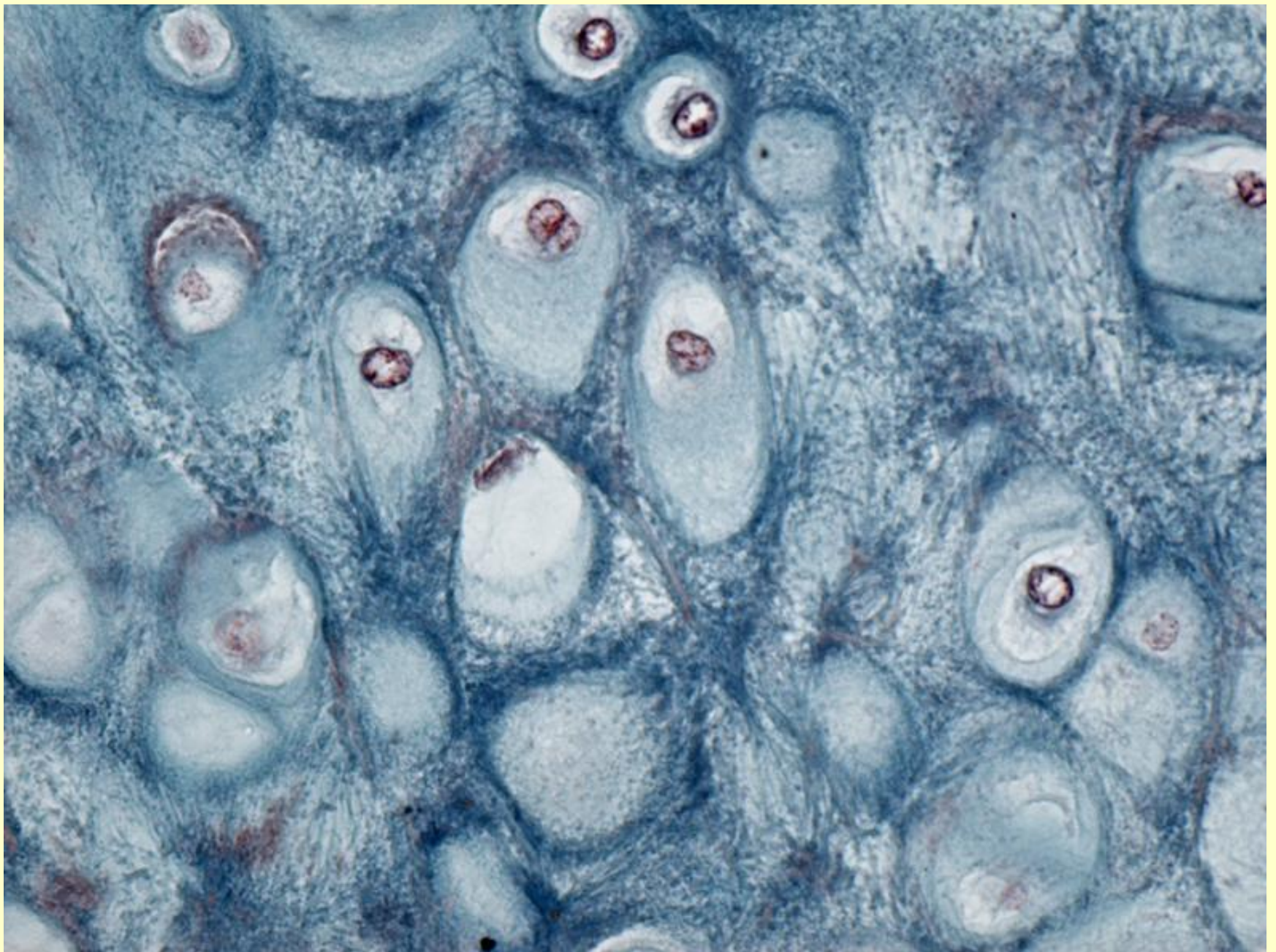
***Cartilaj elastic.
Coloratie Hematoxlină-Eozină***



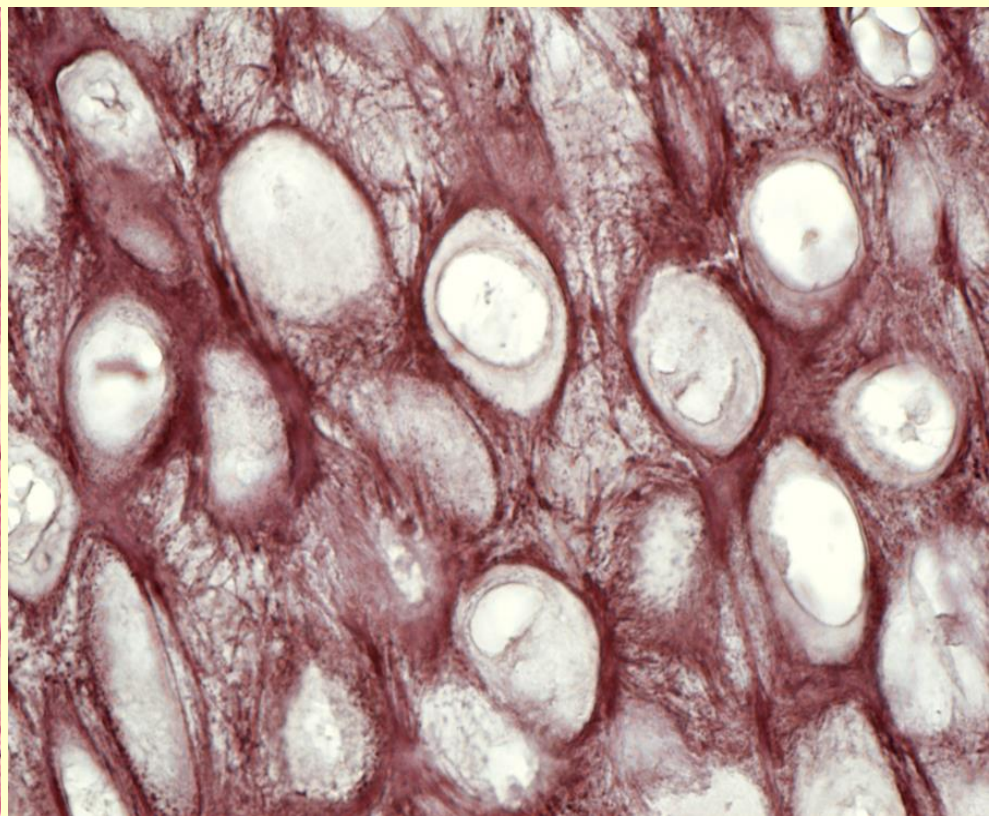
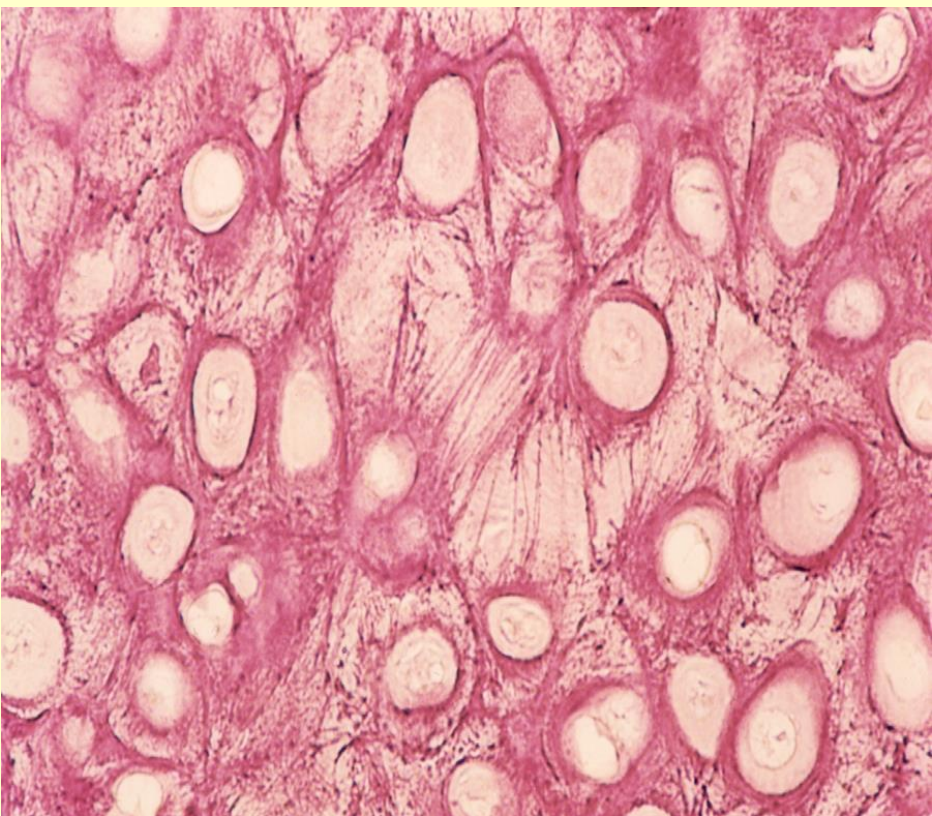
Cartilaj elastic.
Coloratie Hematoxlină-Eozină



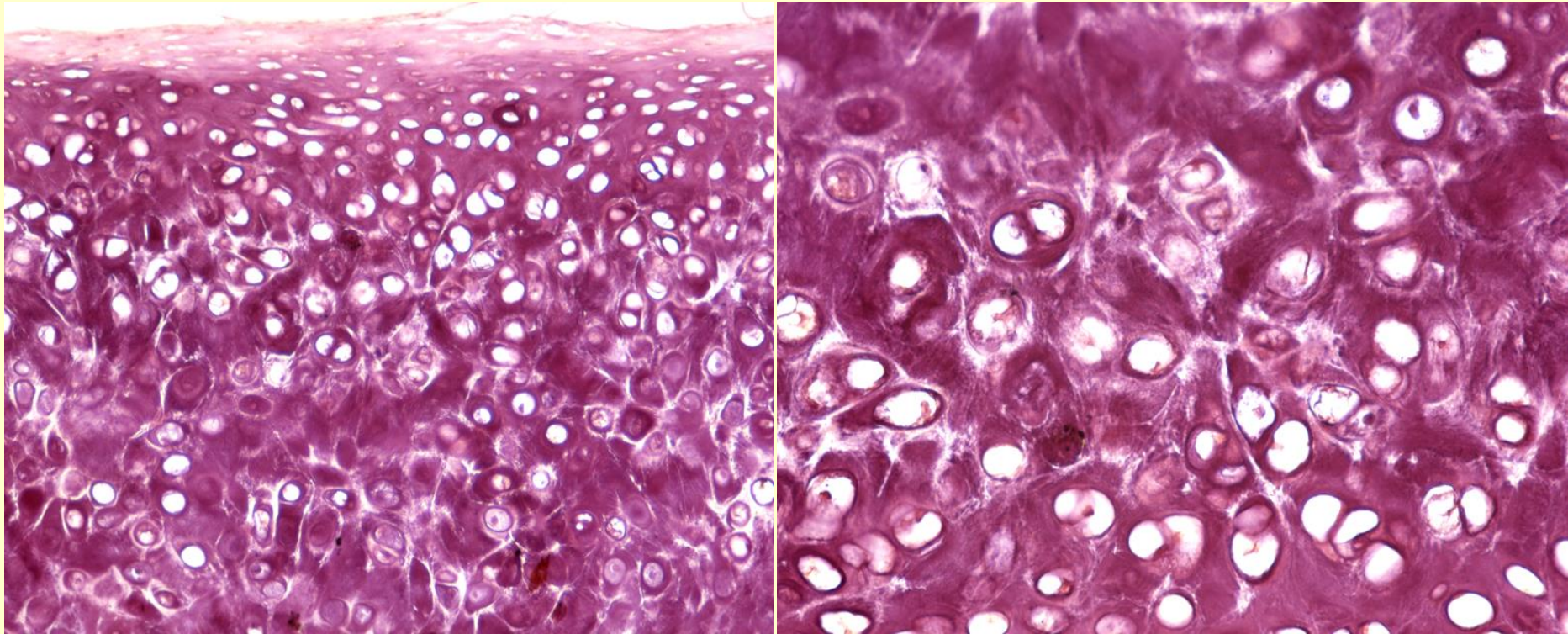
Cartilaj elastic. Pericondru. Coloratie Tricromic GS



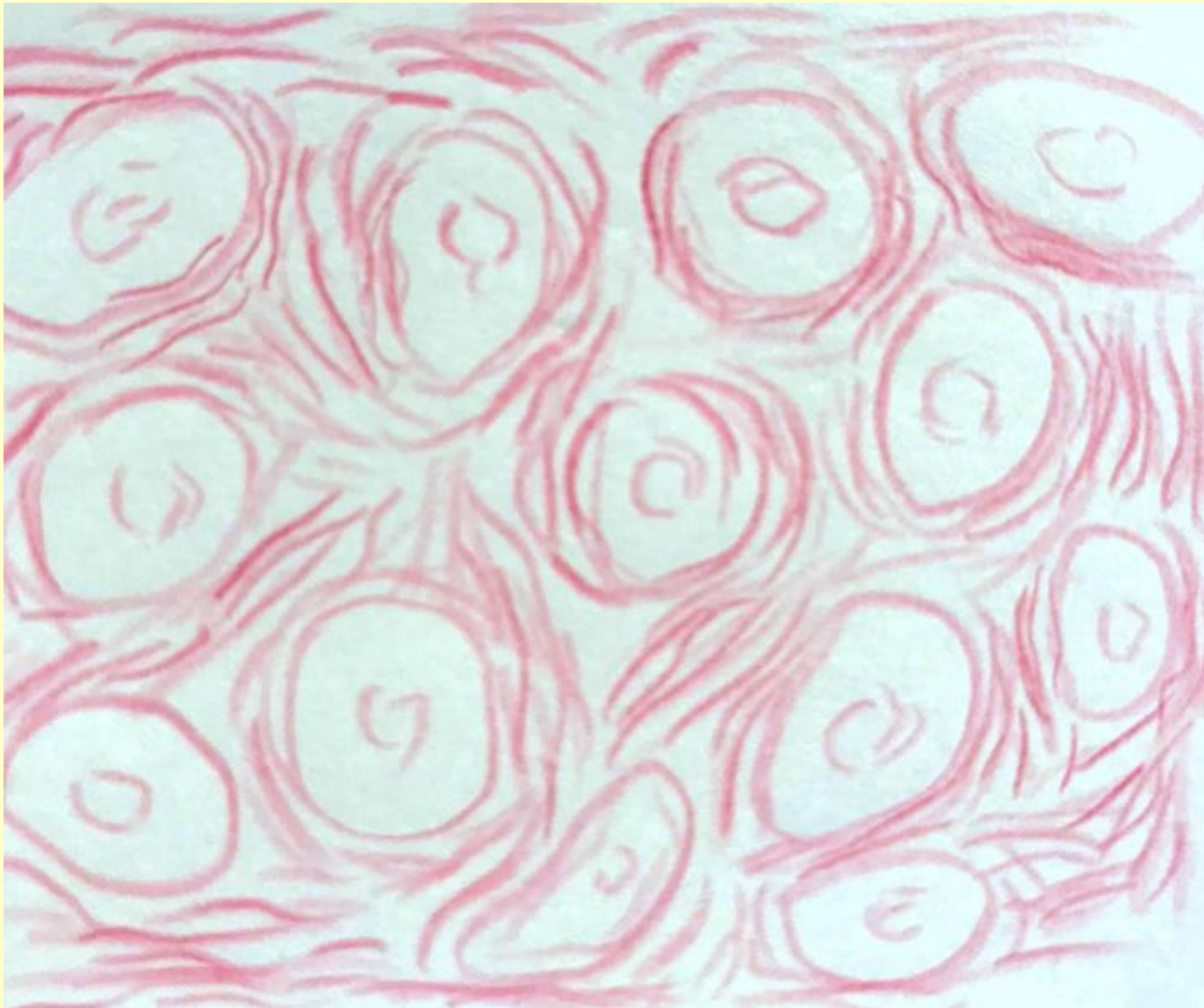
Cartilaj elastic. Coloratie Tricromic GS



Cartilaj elastic. Coloratie Orceina



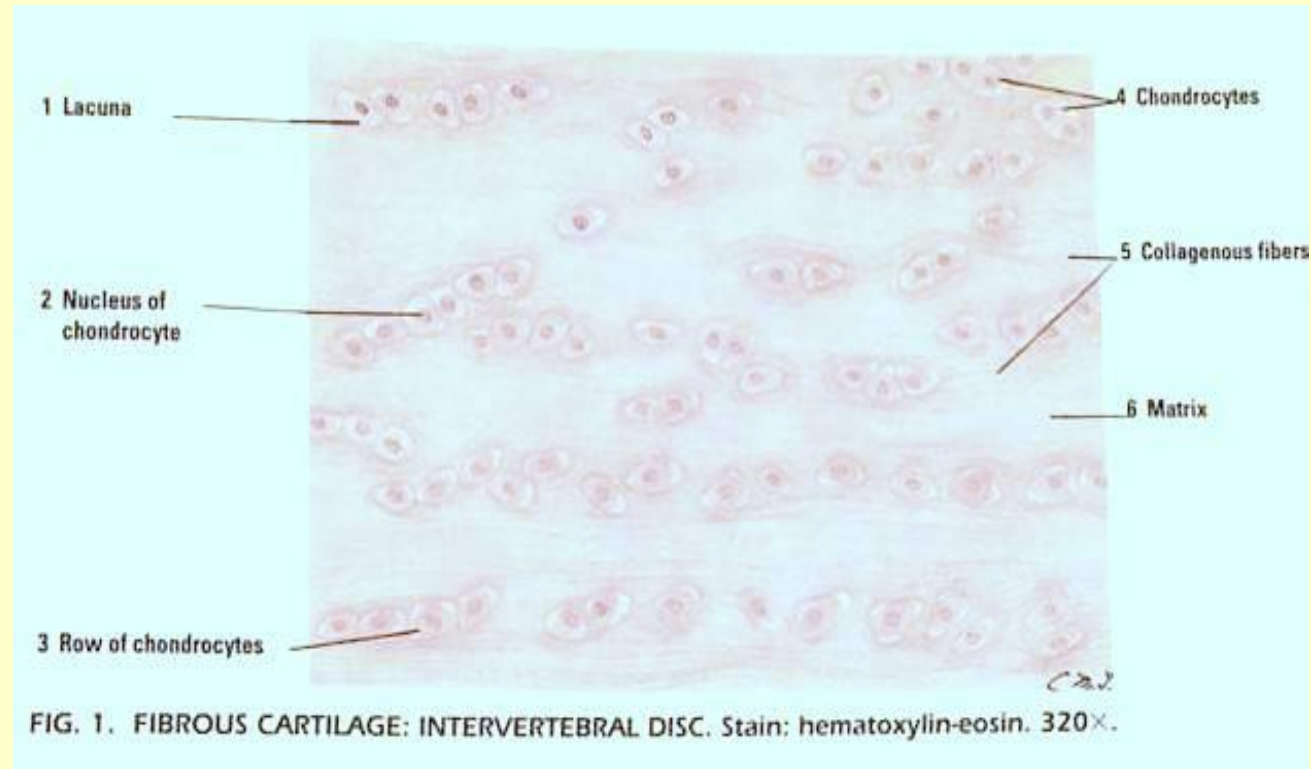
***Cartilaj elastic. Coloratie Coloratie Fuxilina
Weigert.***



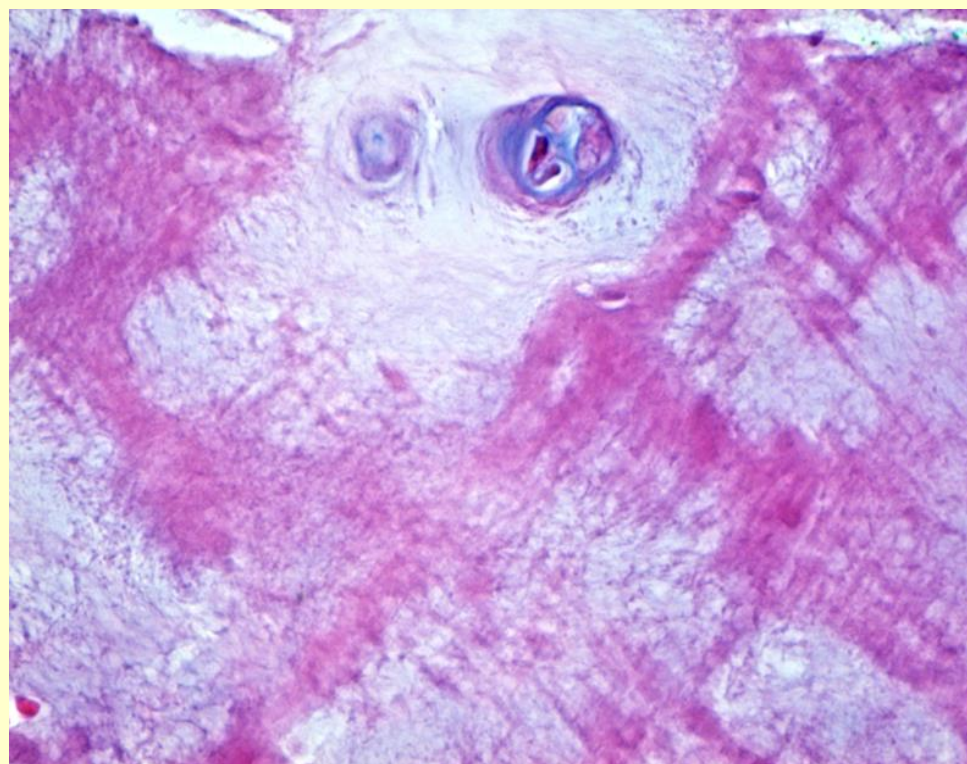
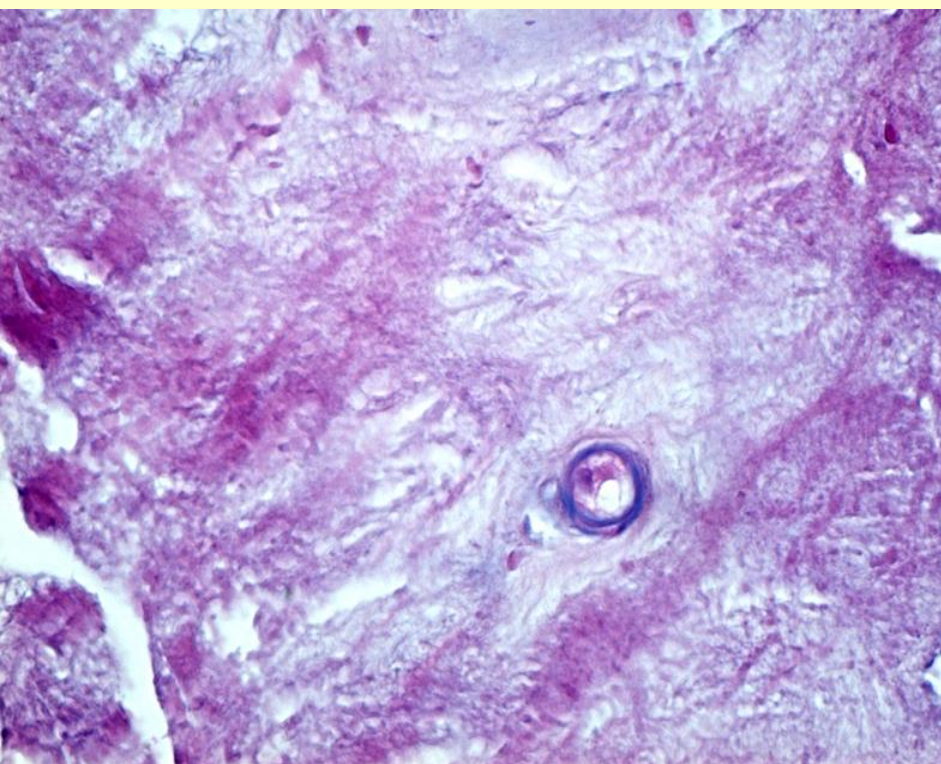
Cartilaj elastic. Fibre elastice. Coloratie Orceina –schema.

CARTILAJUL FIBROS

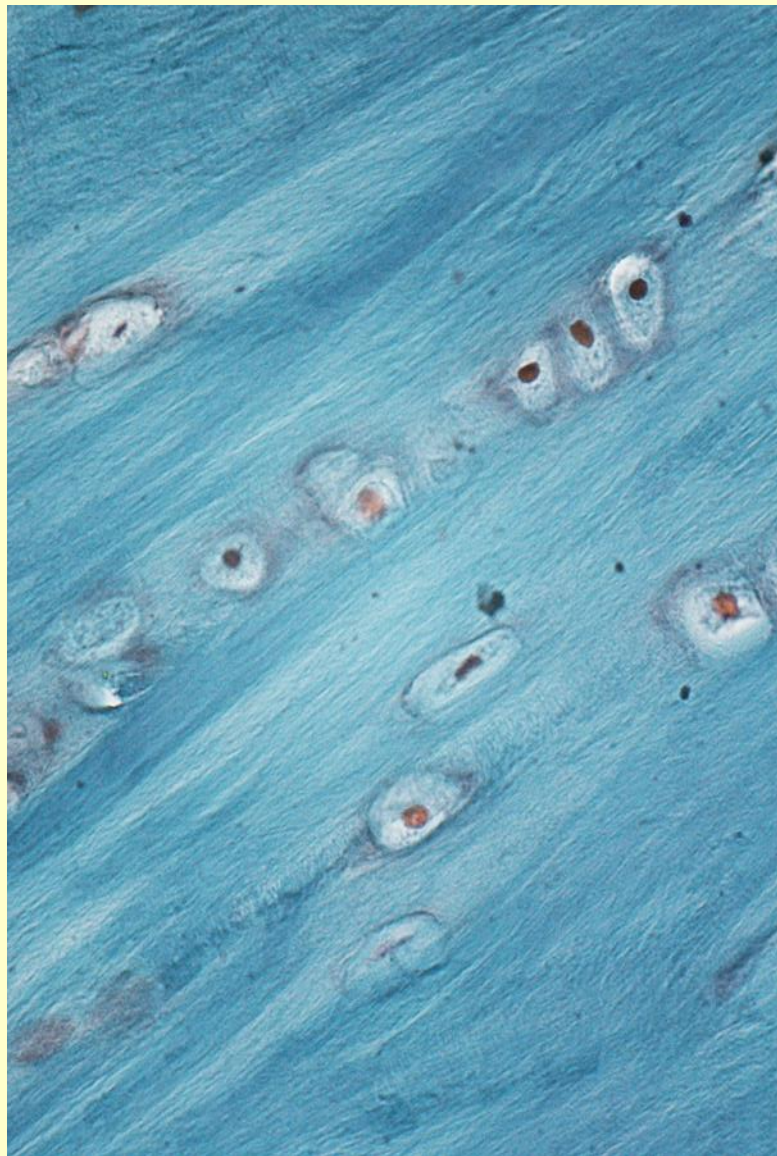
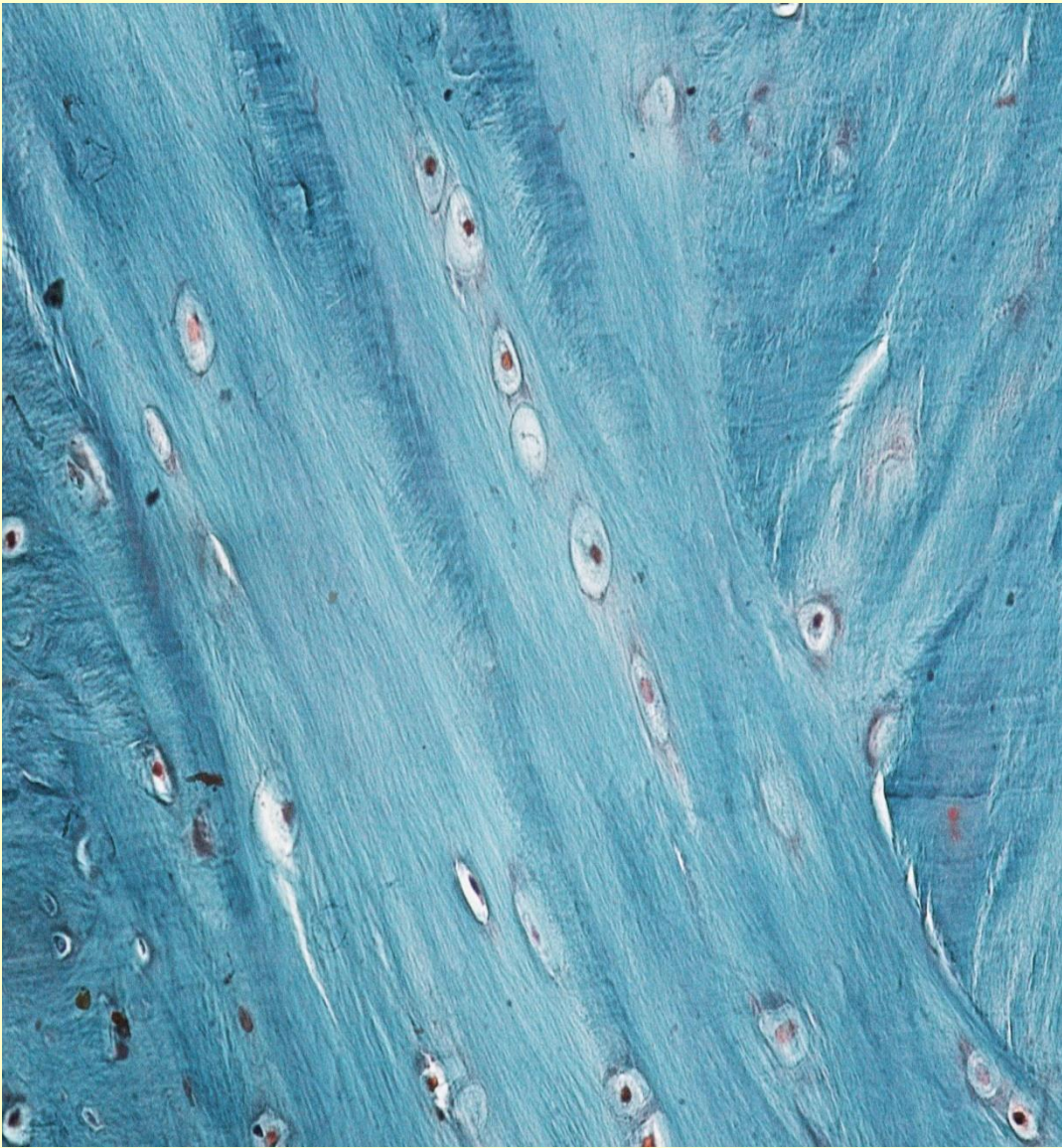
In structura cartilajului fibros domina ***fibrele de collagen*** (colagen tip 1) dispuse sub forma unor fascicule grosiere, cu orientare diferita; printre acestea se gasesc ***insule de cartilaj hialin***; ***substanta fundamentala*** este in cantitate redusa.



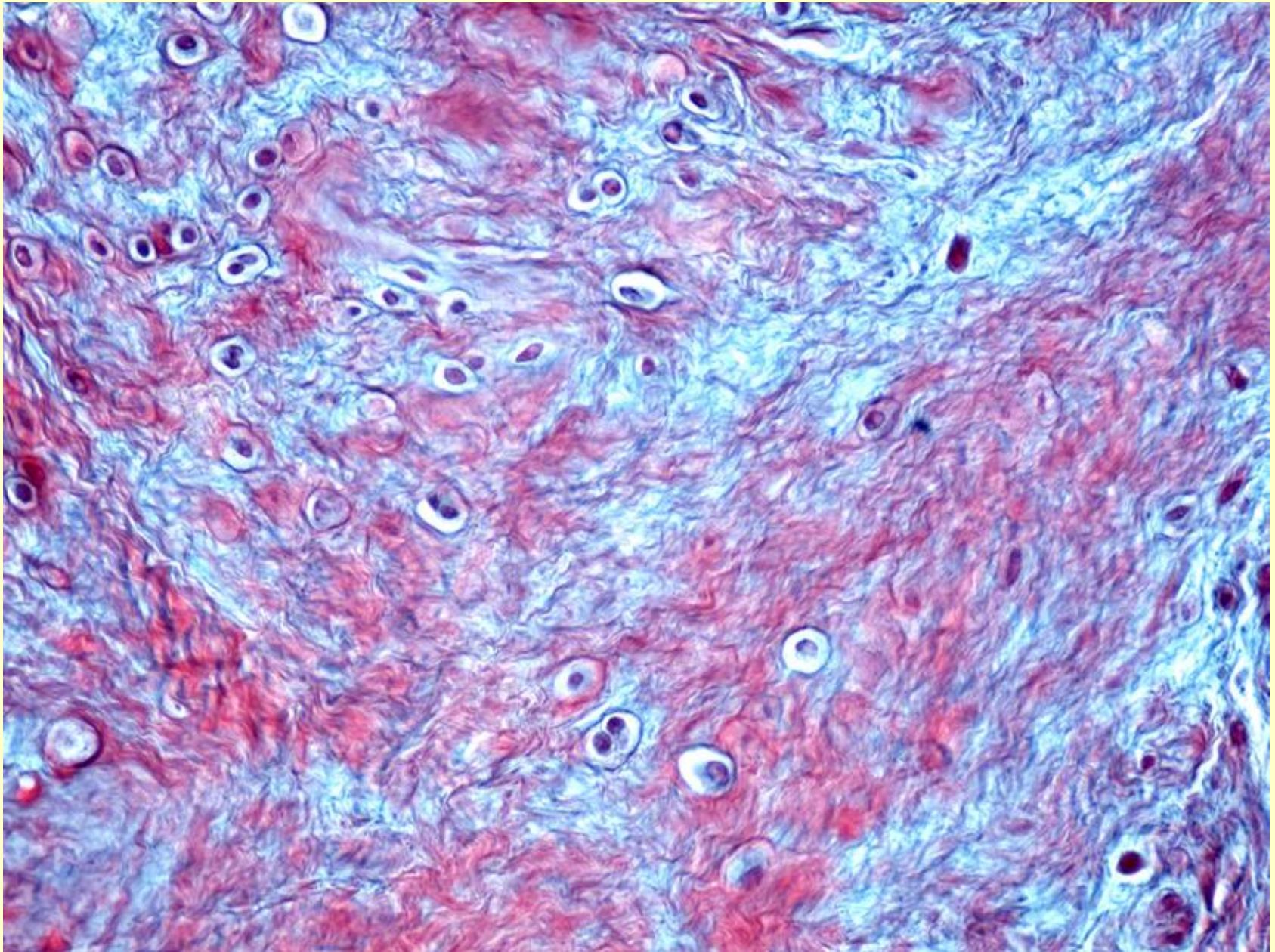
Dupa di Fiore's



Fibrocartilaj. Coloratie Hematoxilina-Eozina



Fibrocartilaj. Coloratie Tricromic GS



Fibrocartilaj. Coloratie Tricromic Masson



Fibrocartilaj. Coloratie Hematoxilina-Eozina si Tricromic Masson

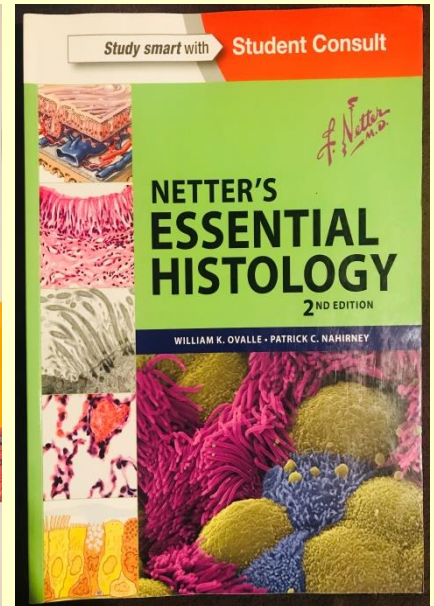
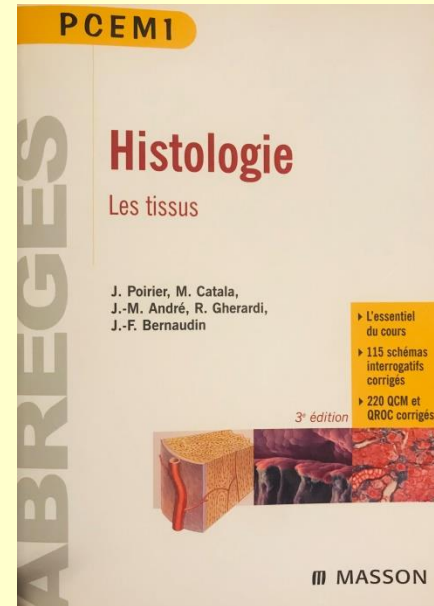
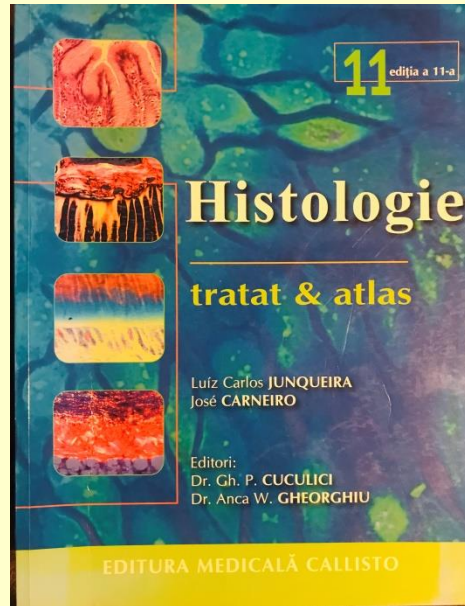
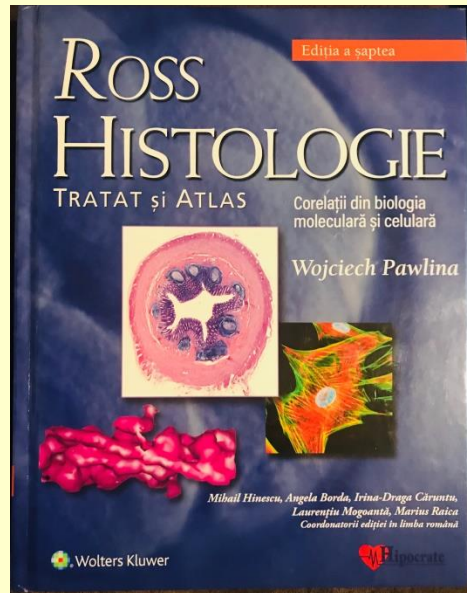
Preparate demonstrative

- 1. Cartilaj hialin. Coloratie Tricromic Masson;**
- 2. Cartilaj fibros. Coloratie Tricromic GS;**
- 3. Cartilaj elastic. Epiglota. Coloratie Fuxilina Weigert;**
- 4. Cartilaj fibros. Coloratie Tricromic Masson;**
- 5. Pericondru. Coloratie Hematoxilina-Eozina si Tricromic GS.**

Preparate de desenat

- 1. Cartilaj hialin. Coloratie Hematoxilina-Eozina;**
- 2. Cartilaj elastic. Coloratie Orceina;**
- 3. Cartilaj fibros. Coloratie Hematoxilina-Eozina si Tricromic Masson.**

Bibliografie



<http://86.122.148.72/virtual-histology/html/caskviewer.html>