



LUCRAREA PRACTICA NR 5

EPITELII GLANDULARE

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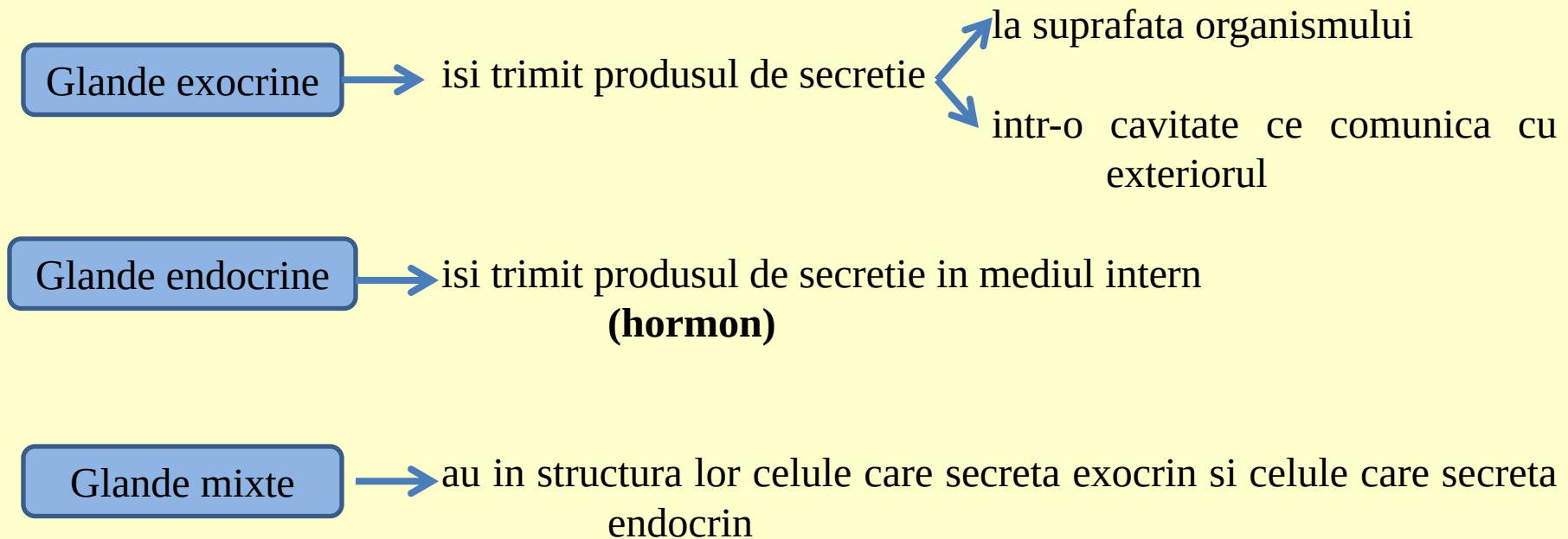
Preparate demonstrative:

- Glanda veziculoasa. Tiroida. Col HE si Tricr GS;
- Glanda tubulara dreapta. Glanda Liberkuhn. Col HE si Tricr GS;
- Glanda alveolara goala. Prostata. Col HE;
- Glanda alveolara plina. Glanda sebacee. Col. HE;
- Glanda tubulo-acinoasa si tubulo-alveolara. Glanda mamara in repaus si in lactatie. Col HE;
- Acin seros. Pancreasc exocrin.Col HE;
- Acin mucos. Glanda salivara mixta. Col HE;
- Glanda unicelulara intraepiteliala. Celula caliciforma din epiteliul intestinal si respirator. Col HE;
- Glanda cordonala. Gl suprarenala. Col HE;
- Glanda difuza (intestitiala). Testicul.Col HE;
- Glanda tecala. Ovar. Col HE

EPITELIILE GLANDULARE

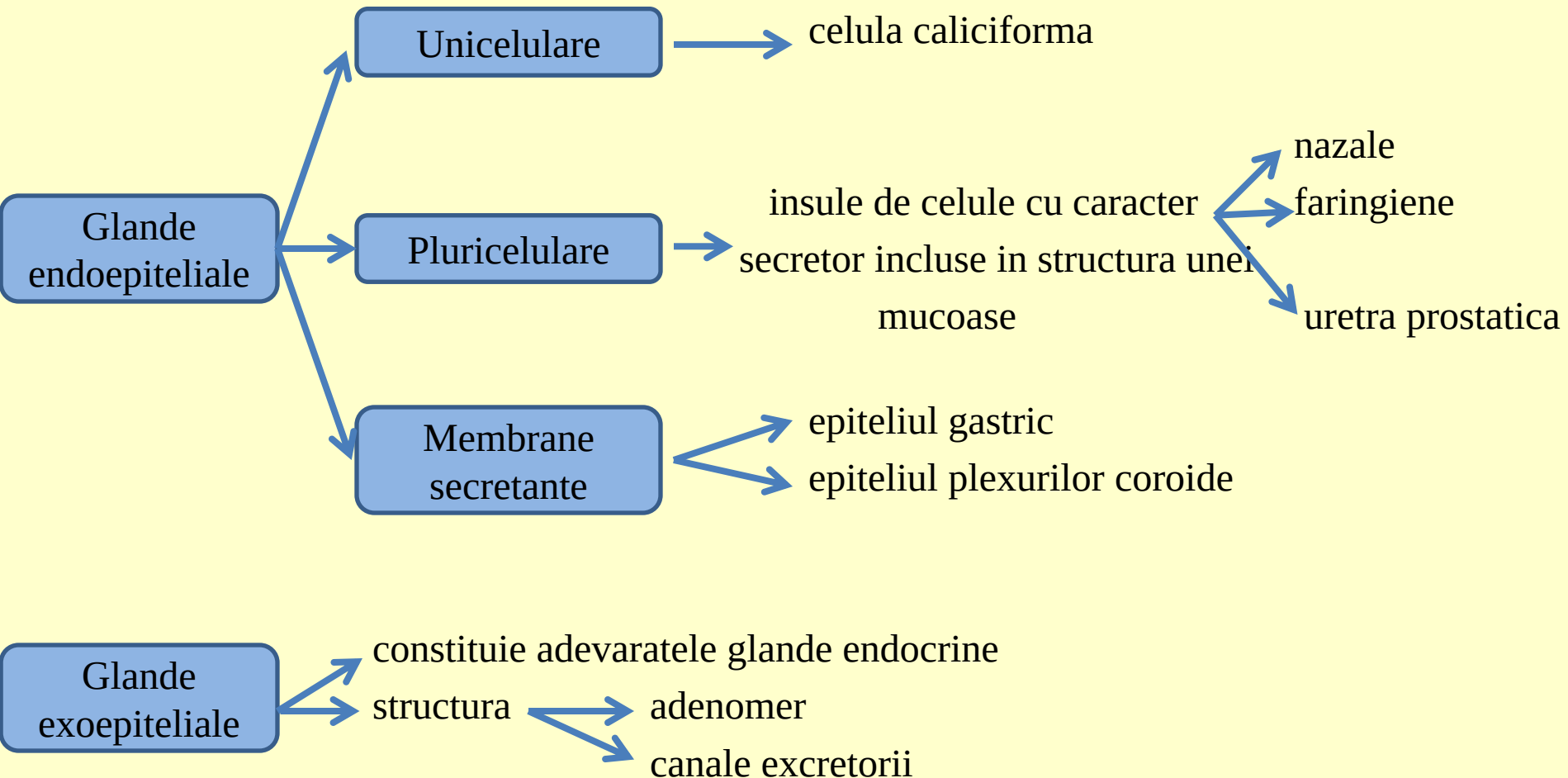
Sunt formate din **celule izolate** sau **grupari de celule**, al caror metabolism, in cursul evolutiei filogenetice s-a specializat in directia **sintezei** unui anumit **produs de secretie**.

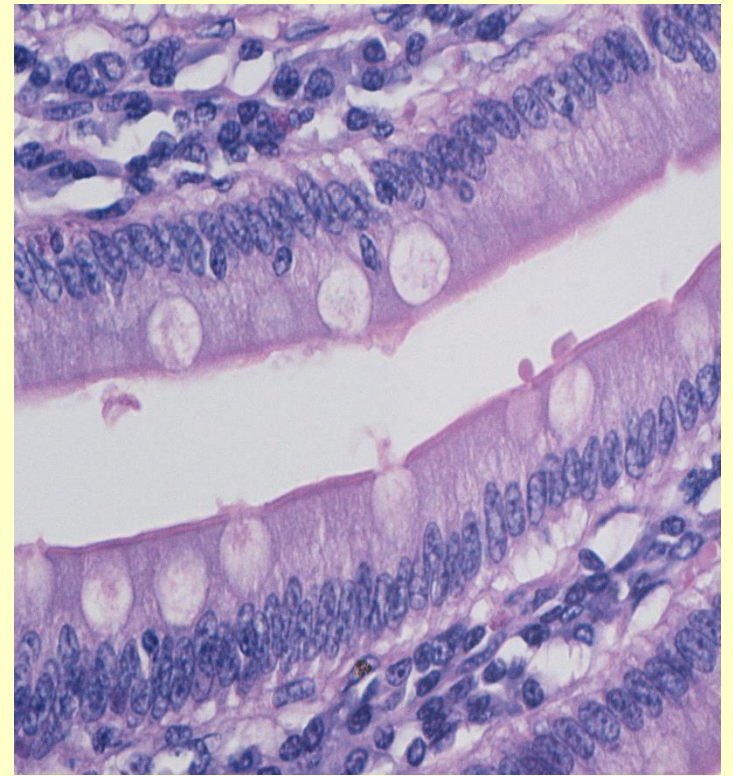
Dupa mediul in care isi trimit produsul de secretie se pot clasifica in:



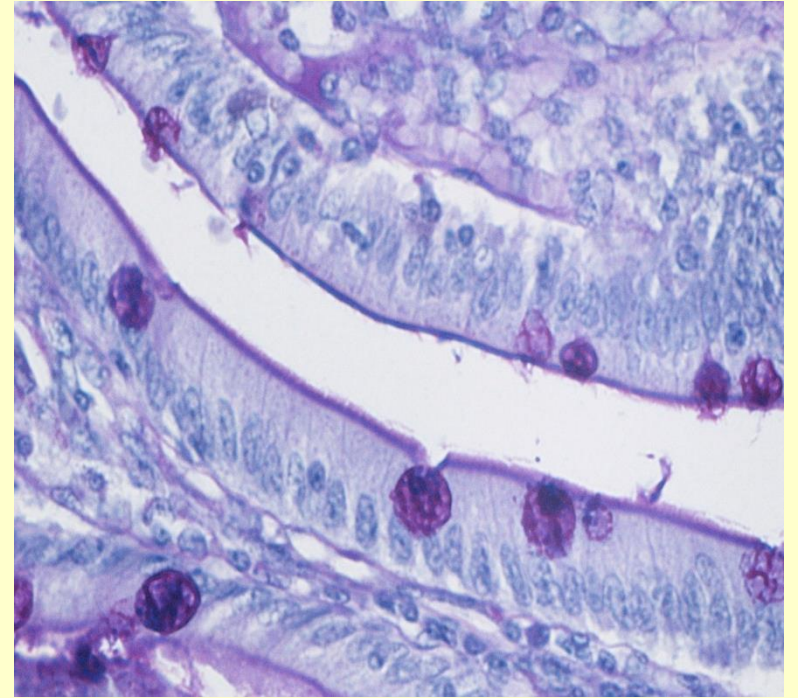
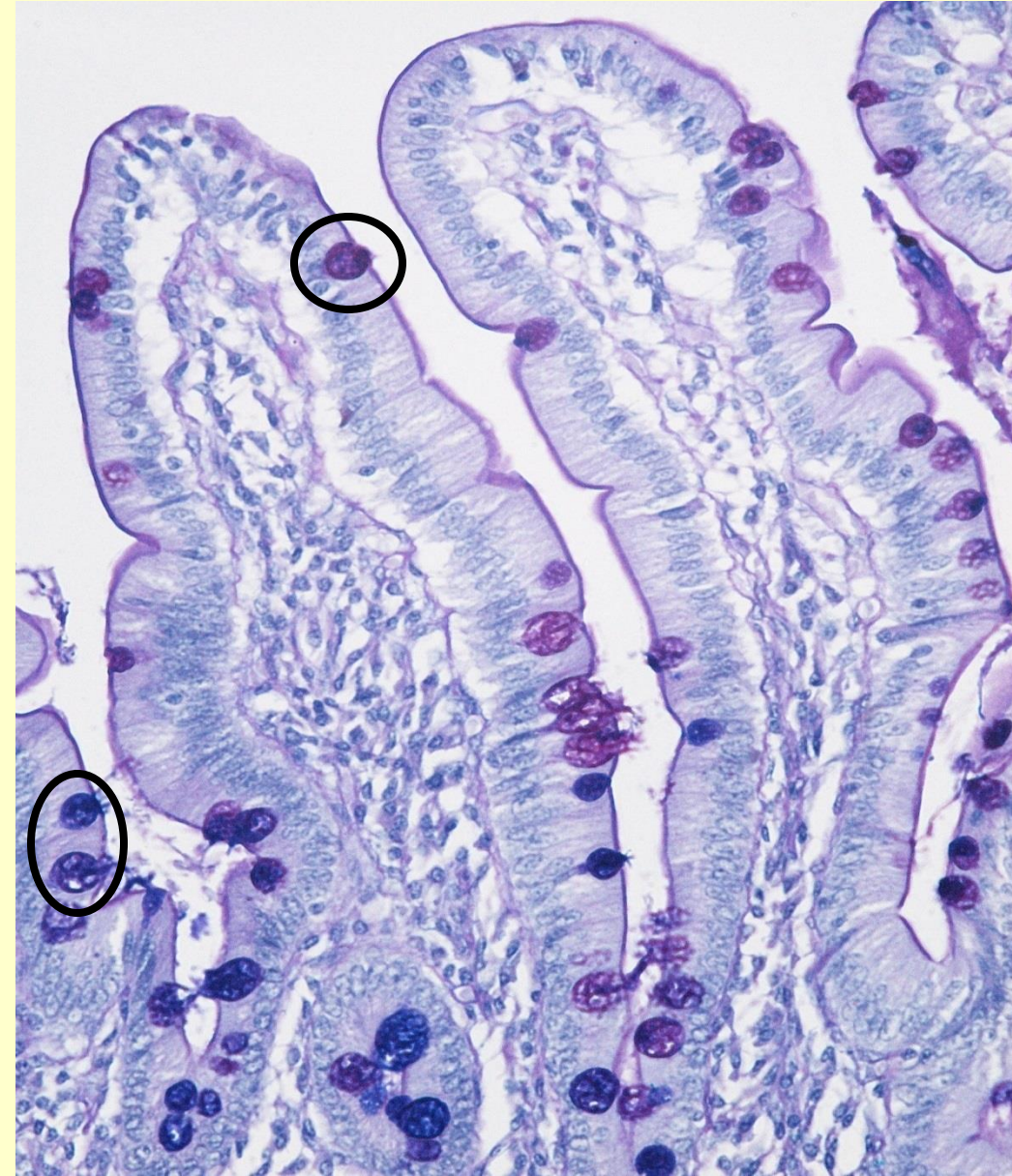
Epitelii glandulare exocrine

Dupa **localizare** se clasifica in:

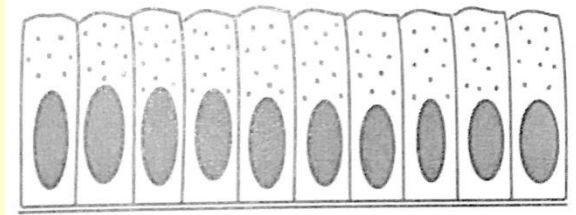
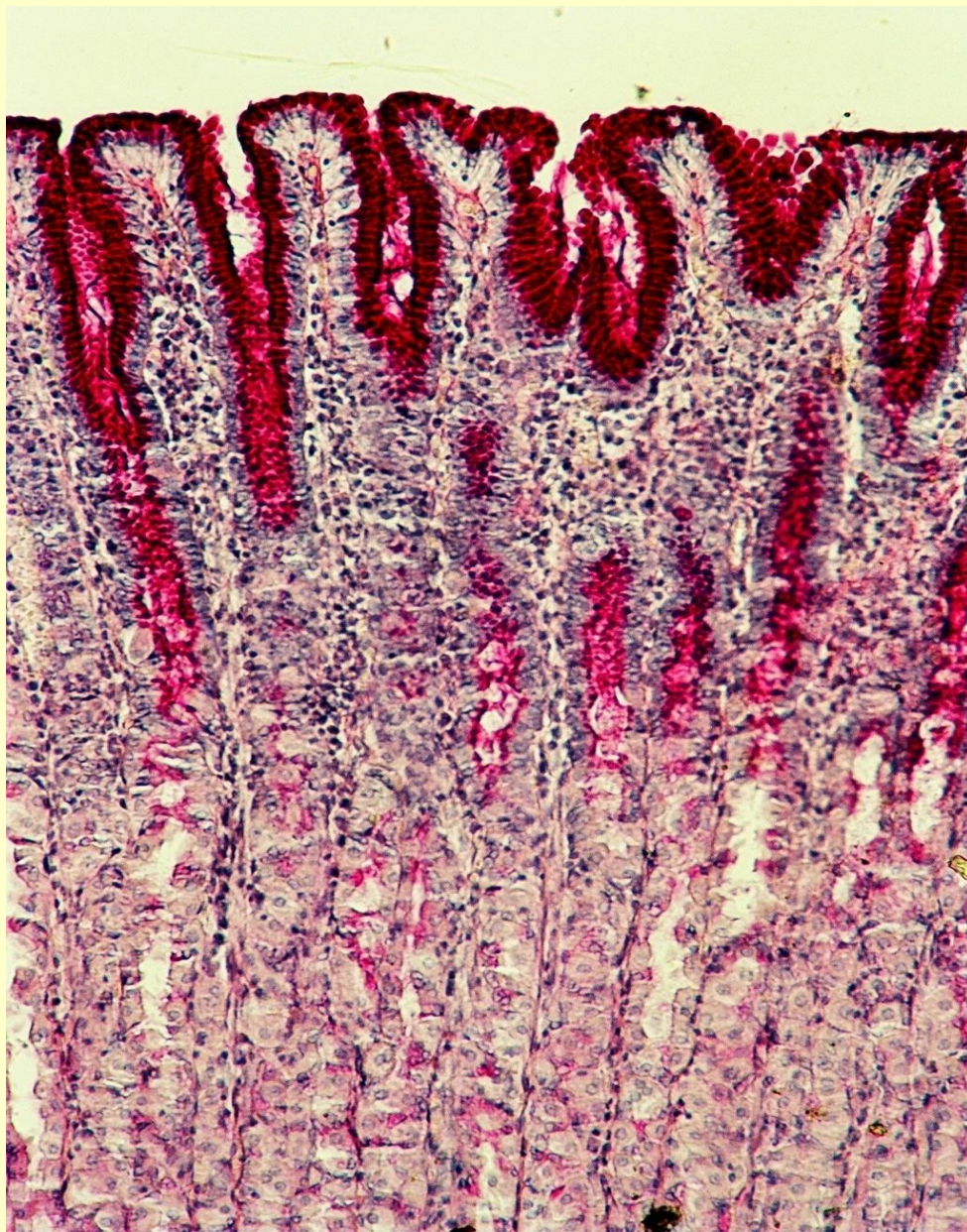




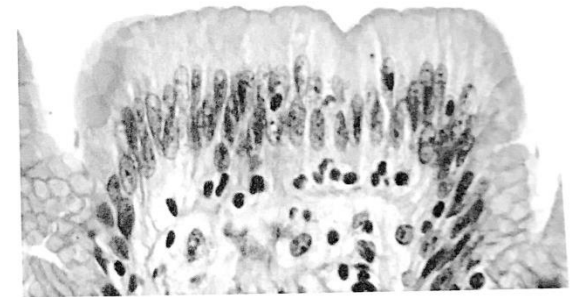
Epiteliu simplu cilindric cu celule caliciforme (glandă unicelulara), vilozitati intestinale,
Coloratie Hematoxilina-Eozina



Epiteliu simplu cilindric cu celule caliciforme (gld. Unicelulare), vilozitati intestinale, Coloratie PAS si Albastru-Alcian



Membrana secretanta -schita



Membrana secretanta –
imagine microscopica

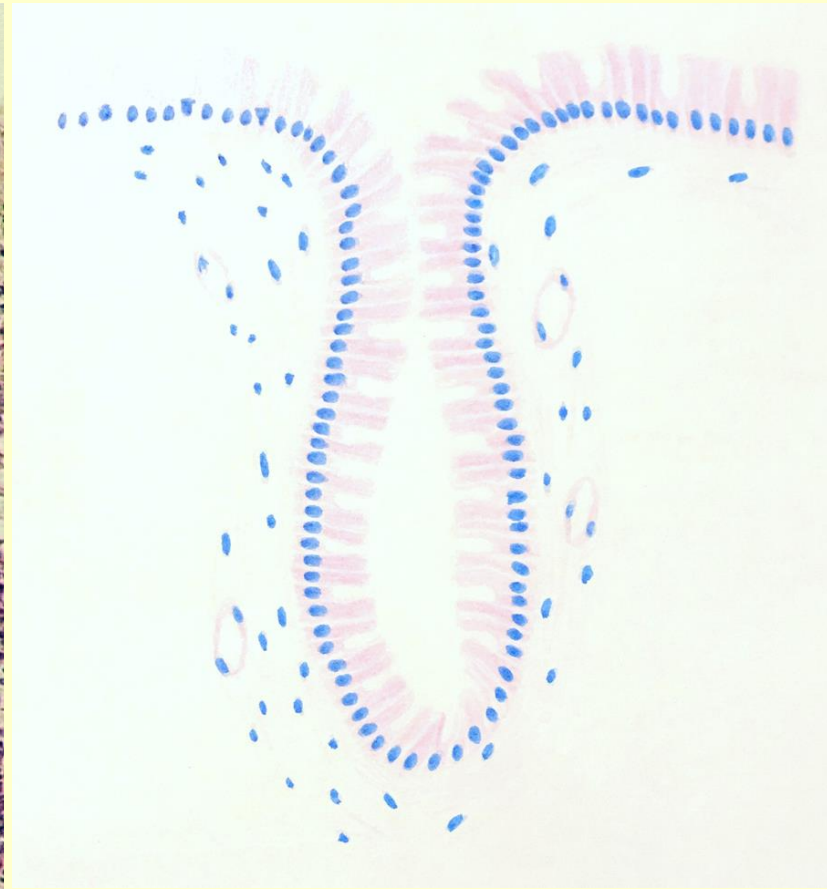
Epiteliu simplu cilindric (membrana secretanta),
Stomac, Coloratie PAS Hematoxilina

Epitelii glandulare exocrine

Clasificare dupa **morfologia adenomerului:**

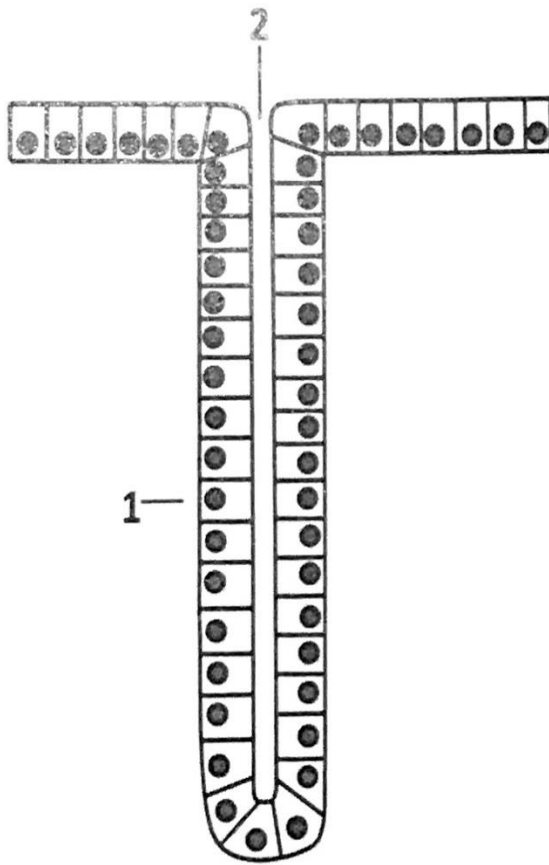


Glanda tubulara dreapta

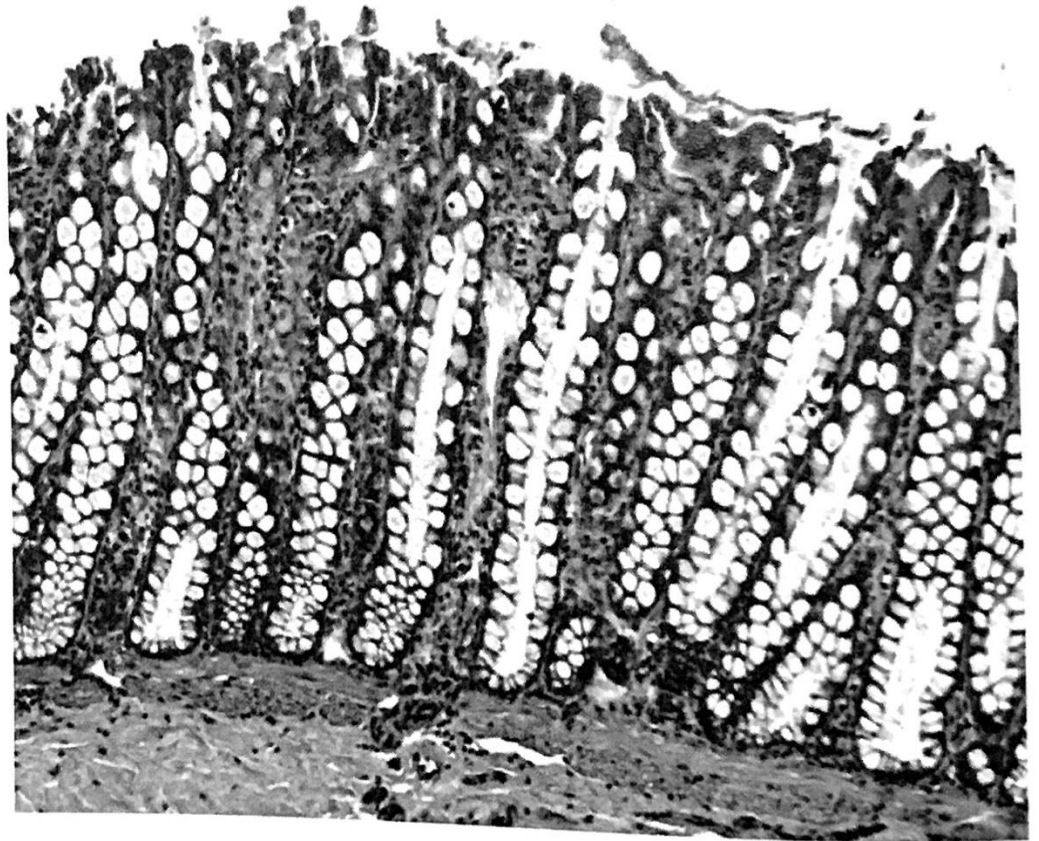


Schiță realizată de Dr. Istrate-Ofițeru Anca-Maria

Glanda tubulara dreapta,
glanda Lieberkuhn, Intestin
gros, Coloratie Hematoxilina-
Eozina



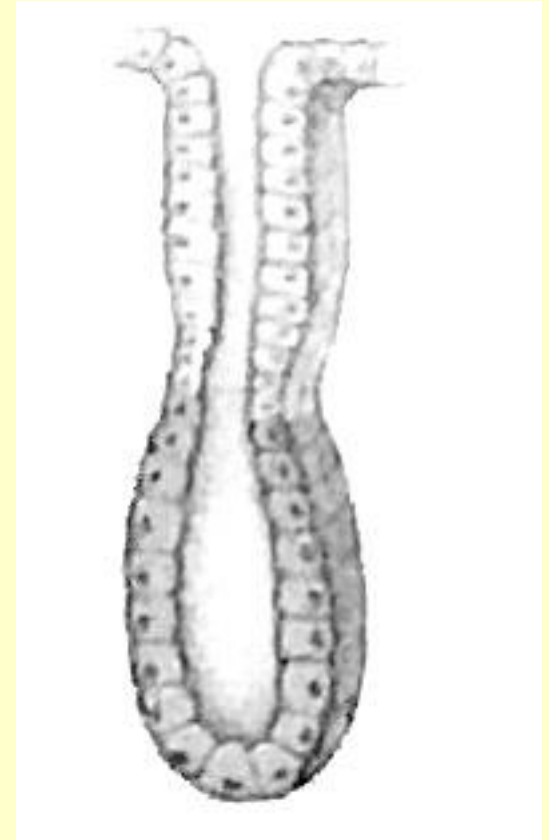
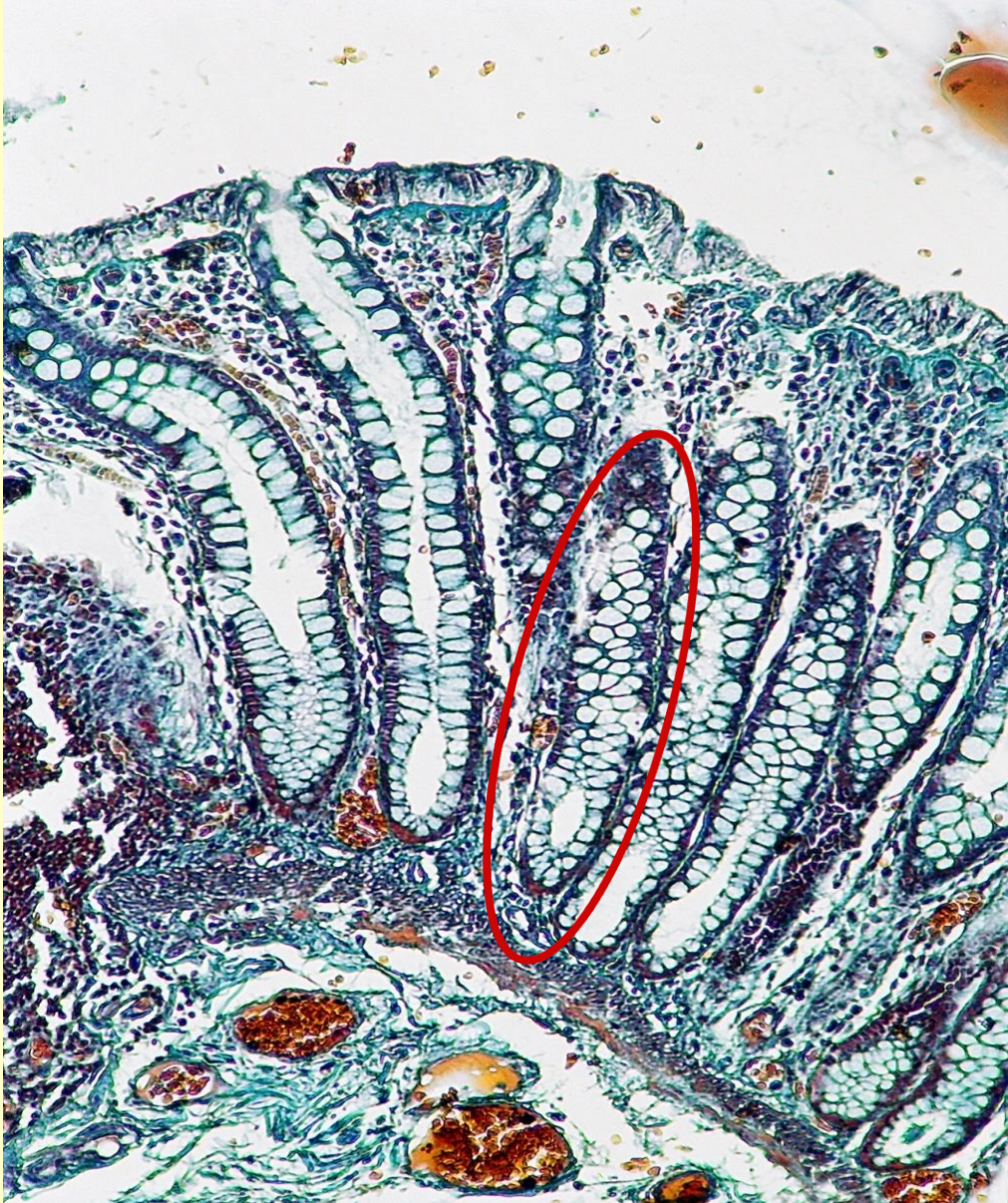
A



B

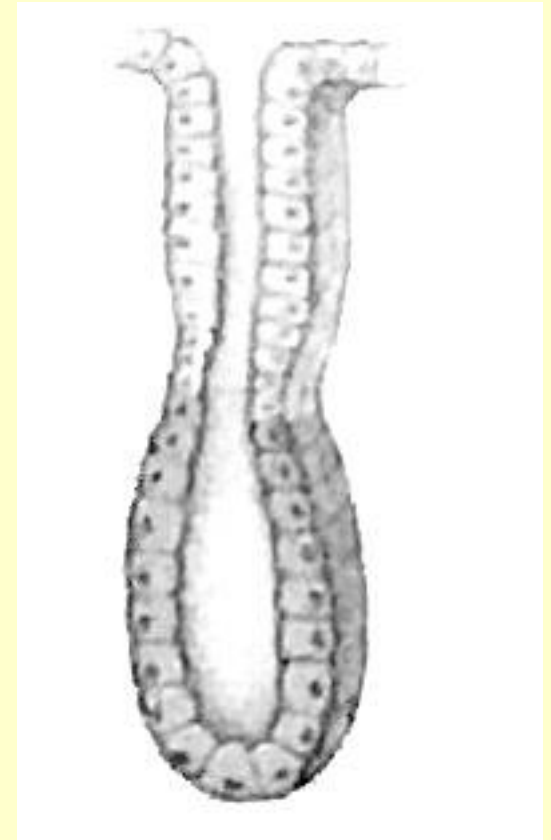
A. Reprezentare schematica: 1- adenomer, 2 – lumen; B. Imagine histologica, colon

Glanda tubulara dreapta



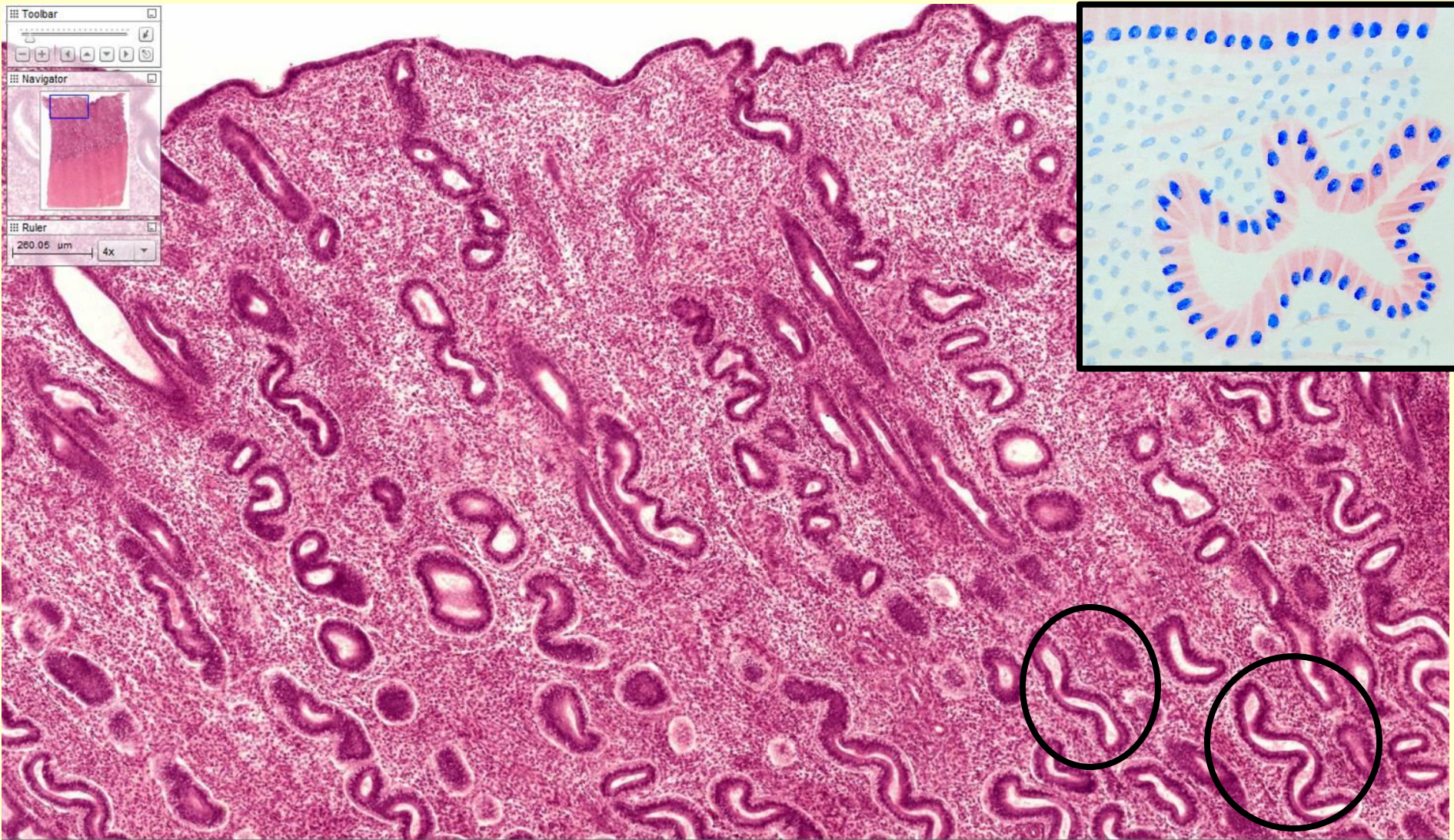
Glanda tubulara dreapta, glanda Lieberkuhn, Intestin gros, Coloratie Tricromic GS

Glanda tubulara dreapta



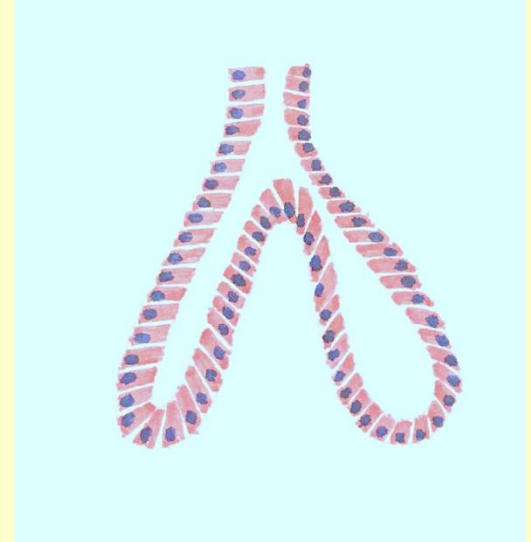
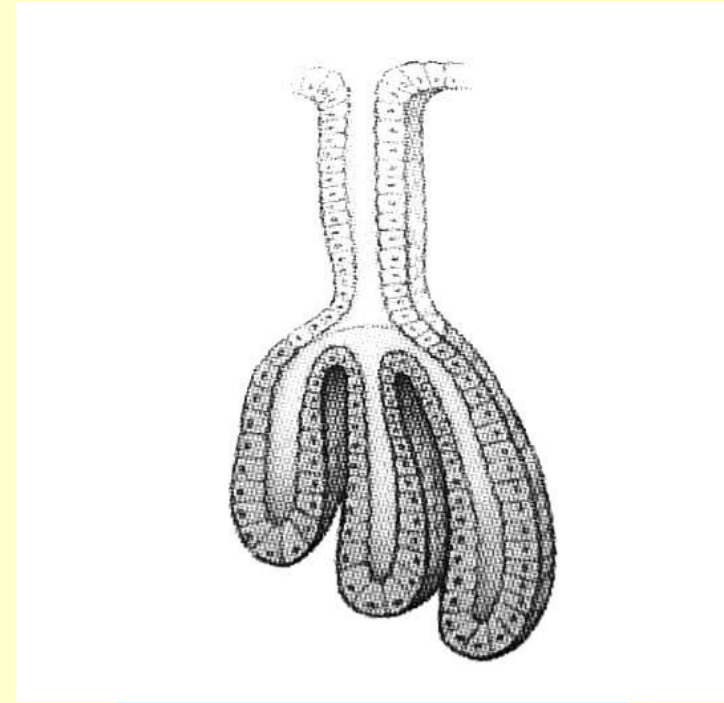
Glanda tubulara dreapta, glanda Lieberkuhn, Intestin subtire, Coloratie Hematoxilina-Eozina

Glanda tubulara sinuoasa



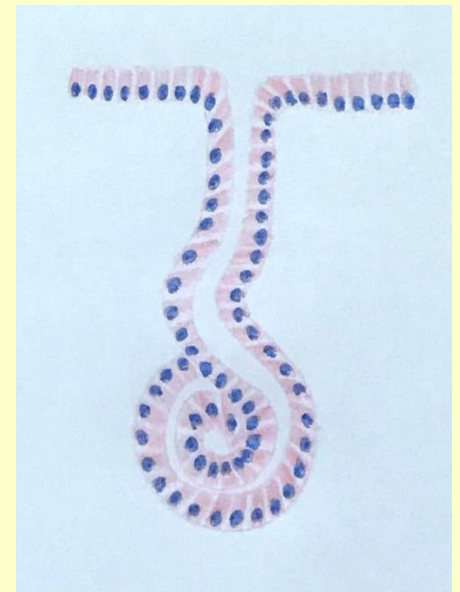
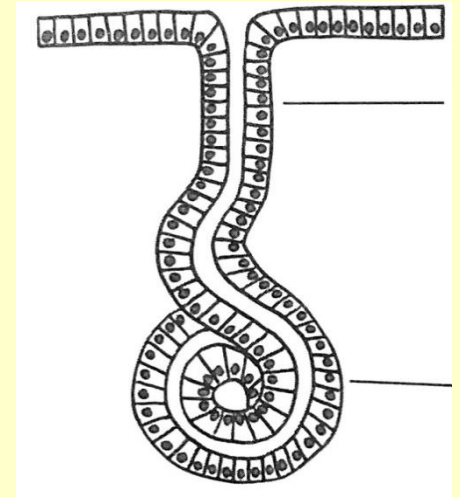
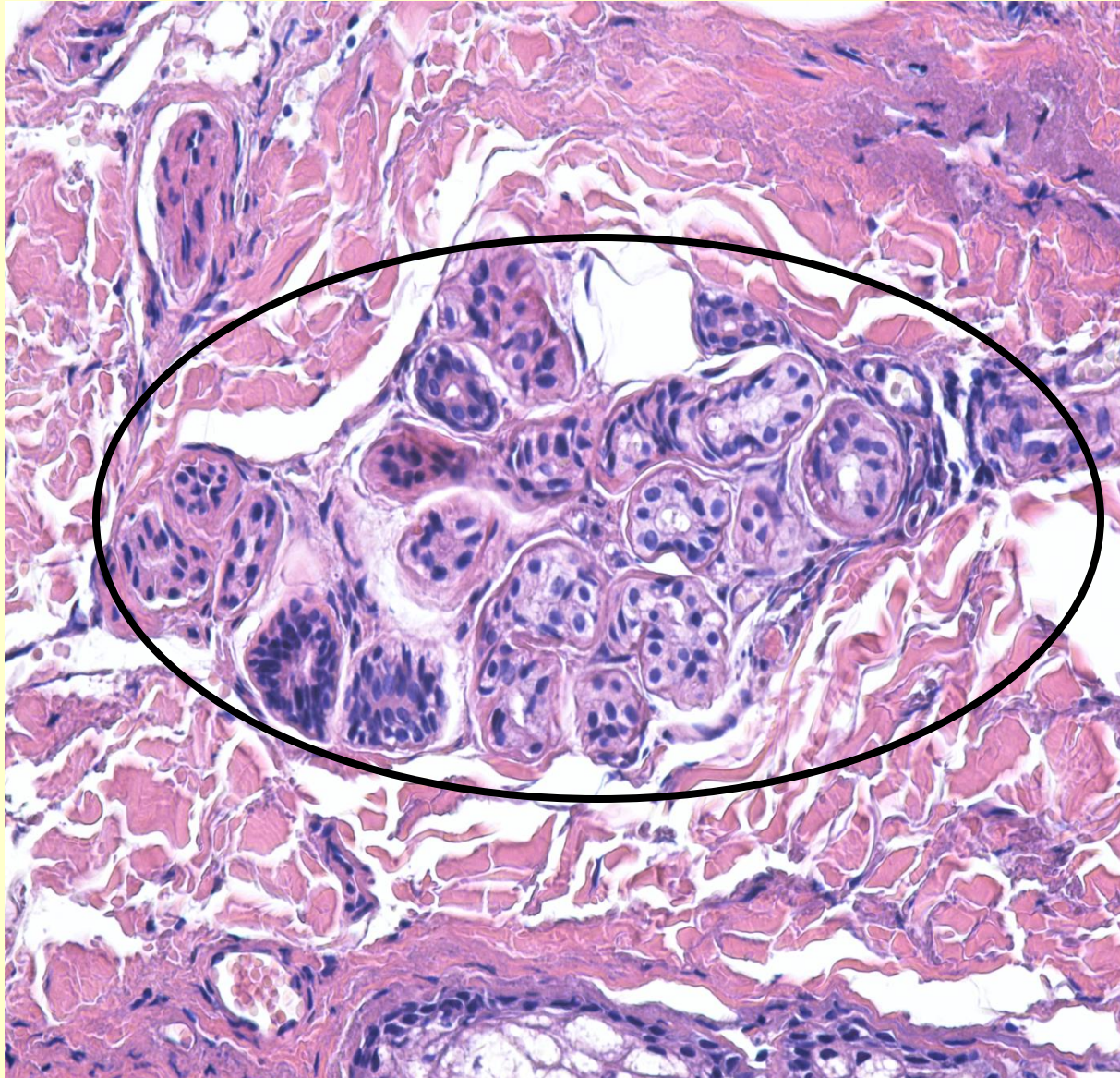
Glande sinuoase, Glande endometriale in faza progesteronica, Coloratie Hematoxilina-Eozina

Glanda tubulara ramificata



Glande tubulare ramificate, Glande esofagiene,
Coloratie Hematoxilina-Eozina

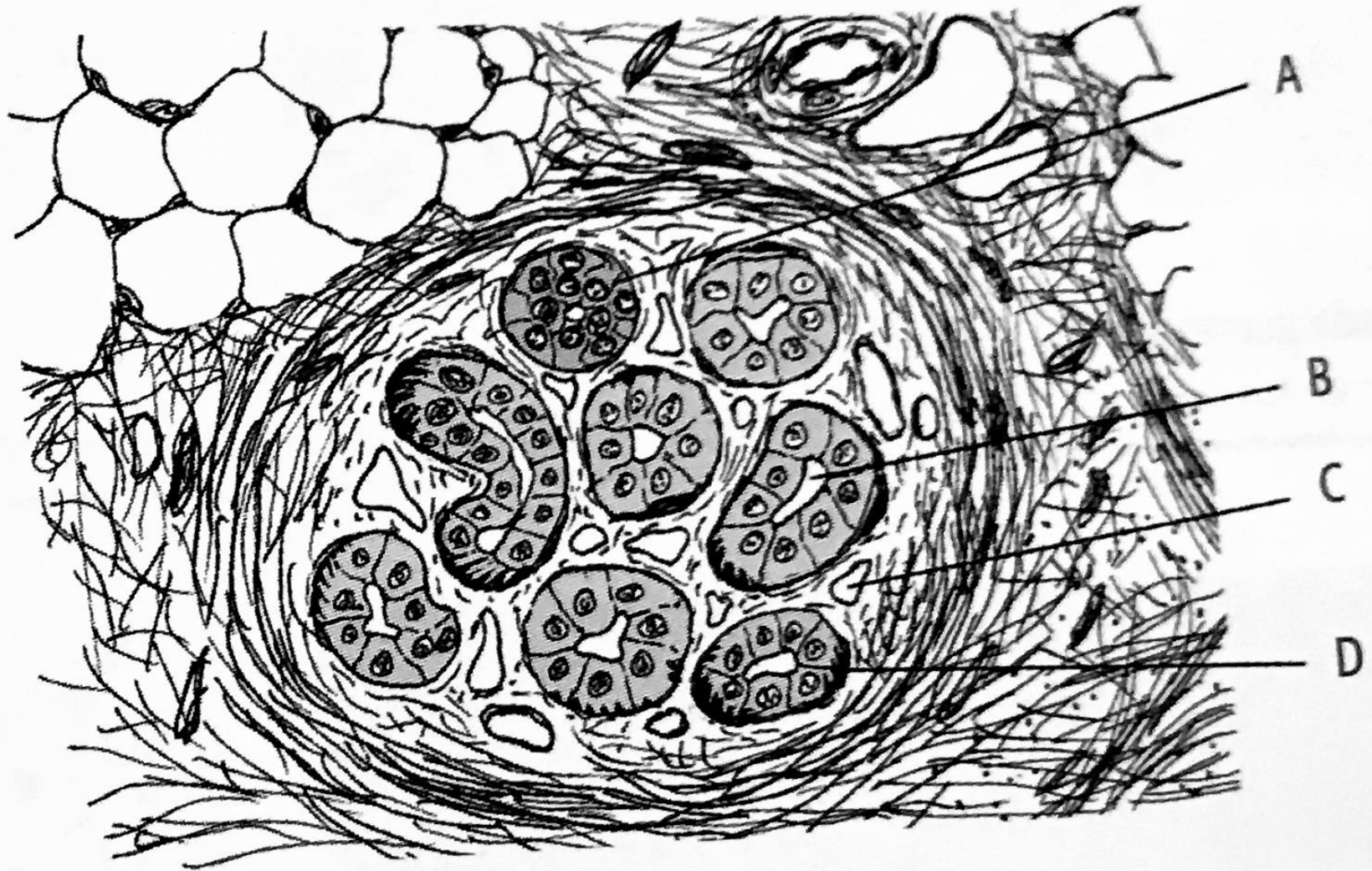
Glanda tubulara glomerulata



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Glanda tubulara glomerulata, Glanda sudoripara, Coloratie Hematoxilina-Eozina

Glanda tubulara glomerulata



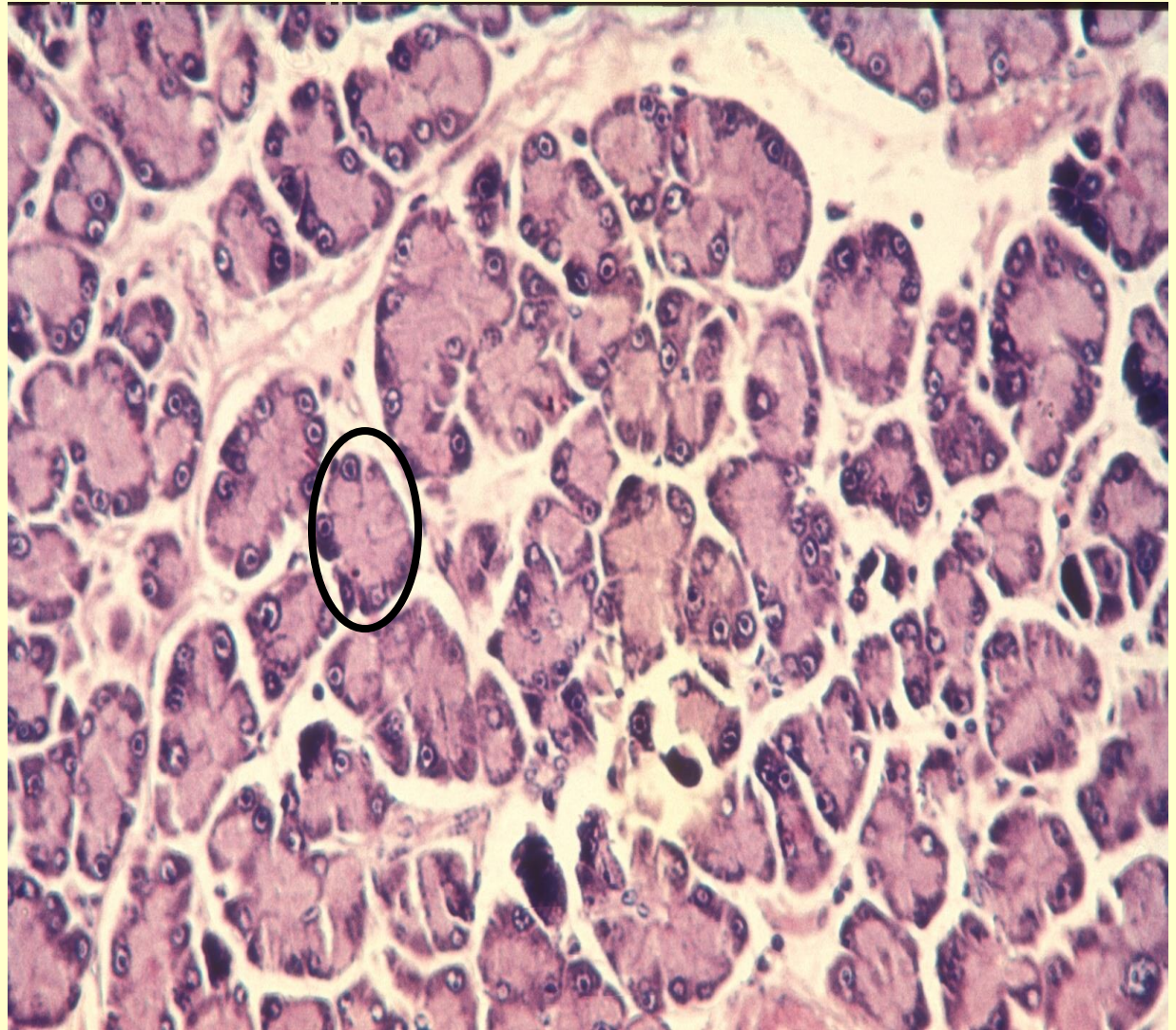
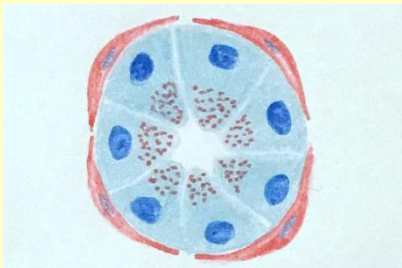
Glanda tubulara glomerulata, Glanda sudoripara, schita.

A. Canal excretor, B. portiunea secretorie, C. capital de sange, D. celula mioepiteliala.

Glande acinoase

Acinul seros

Acinul seros are forma sferică, este alcătuit din celule piramidale ce delimitează un lumen îngust și stelat.; nucleul este dispus la polul bazal al celulei, la polul apical se găsesc granulele de zimogen. Între polul bazal al celulei și glandile se găsesc celule mioepiteliale.



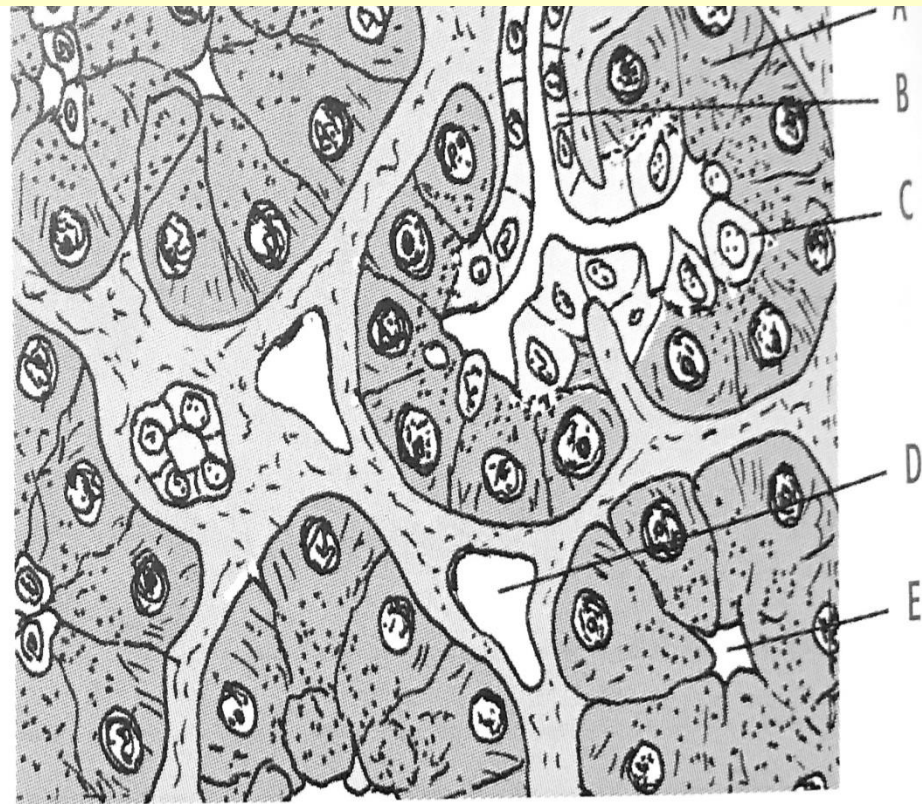
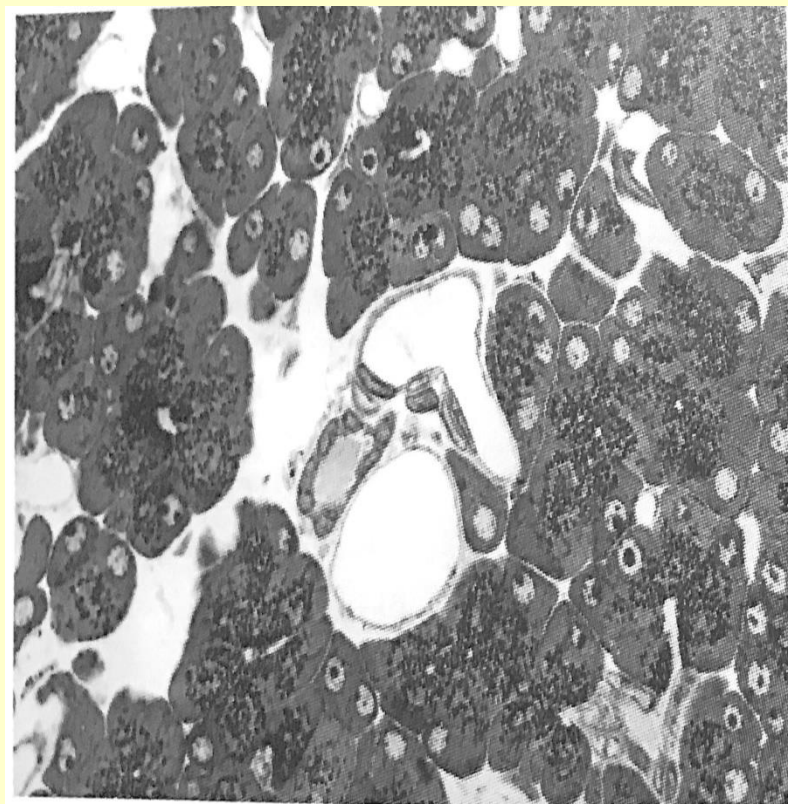


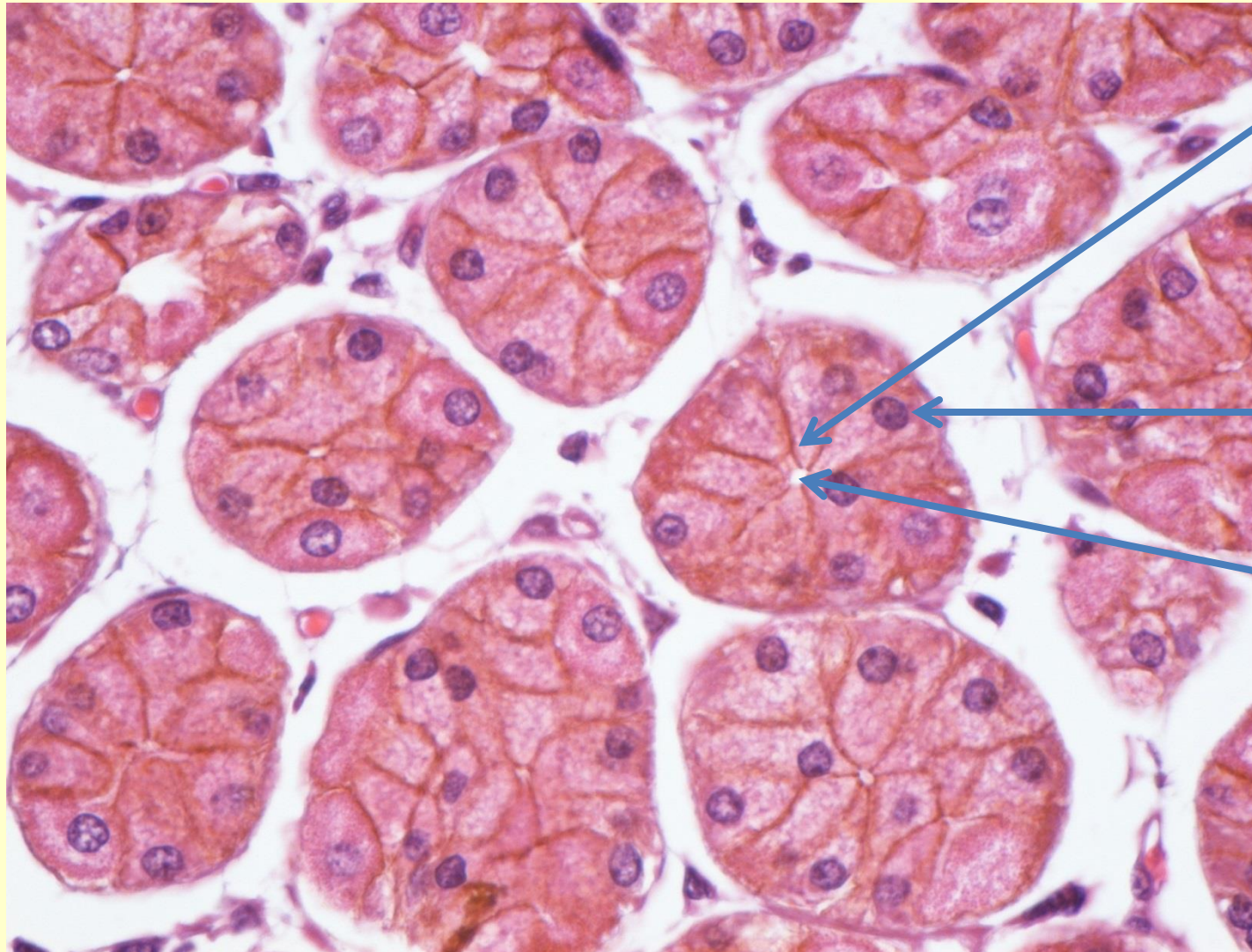
Fig. 3.4

Pancréas. MO.

A. Cellule séreuse d'un acinus pancréatique. B. Épithélium d'un canal excréteur. C. Cellule centro-acineuse. D. Capillaire sanguin. E. Lumière d'un acinus.

Glande acinoase

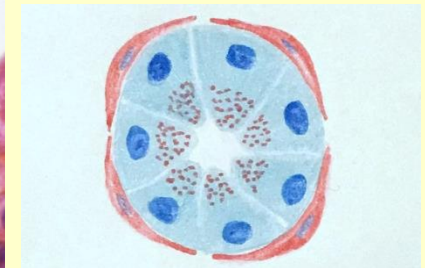
Acinul seros



Pol apical

Pol bazal

Lumen

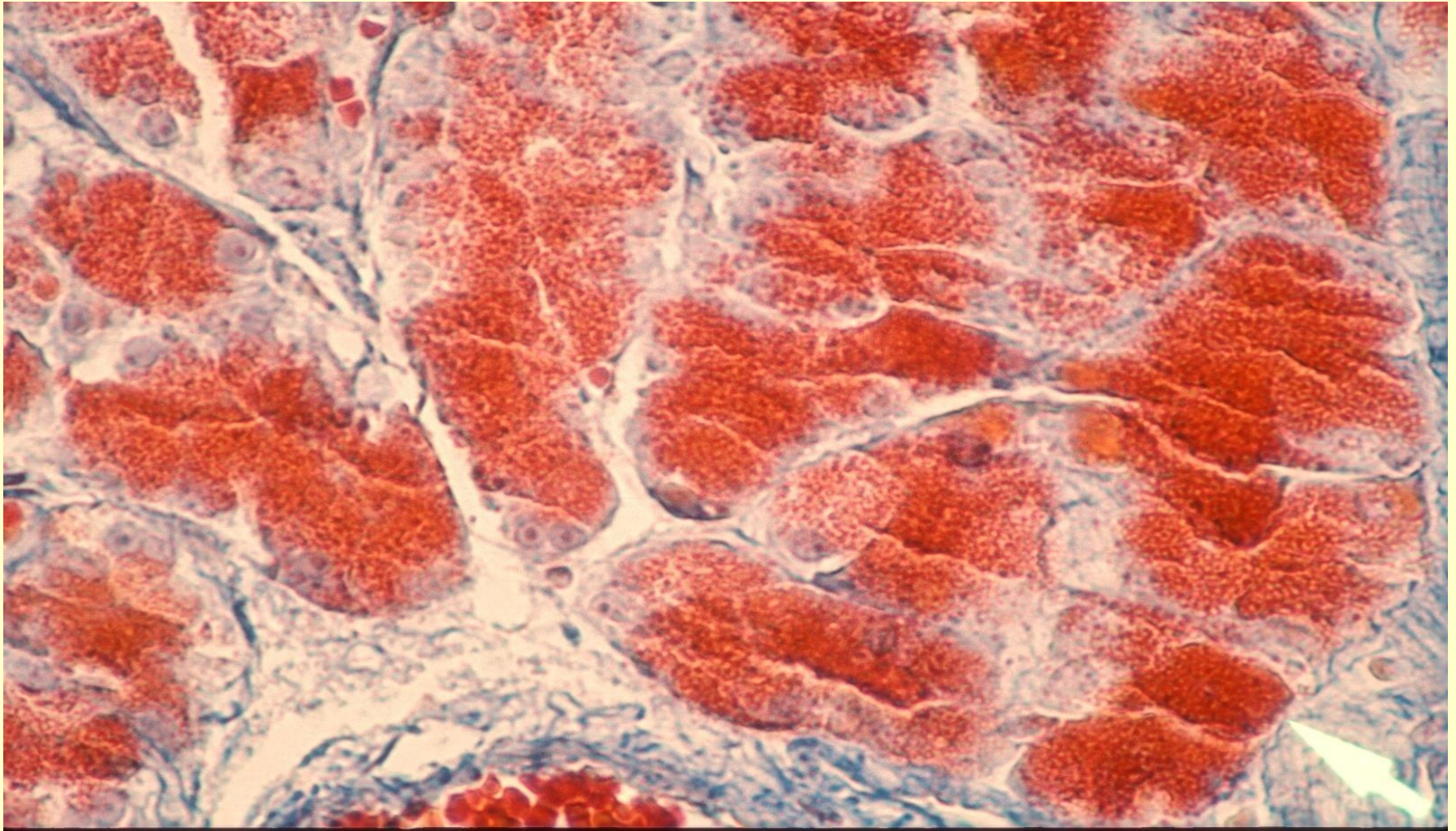


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Acini serosi, pancreas. Coloratie Hematoxilina-Eozina

Glande acinoase

Acinul seros

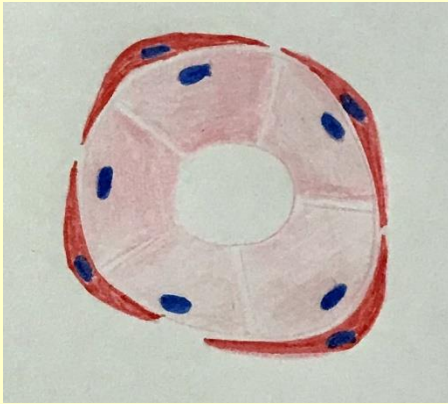


Acini serosi, pancreas. Coloratia Bensley

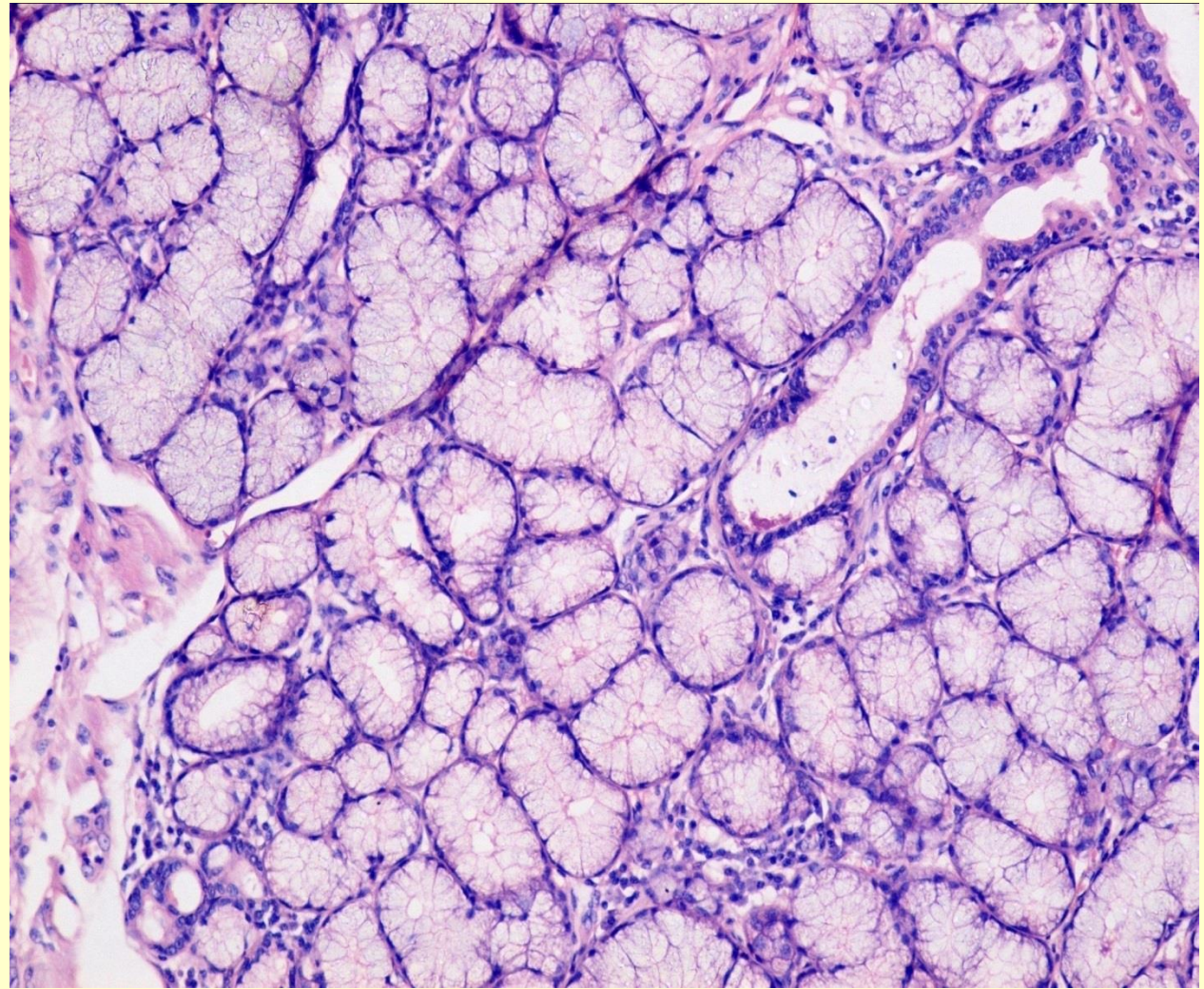
Glande acinoase

Acinul mucos

Acinul mucos are forma ovalara, este alcatuit din celule de forma trapezoidala cu citoplasma clara ce delimiteaza un lumen mai larg. Nucleul celulelor este localizat la polul bazal.



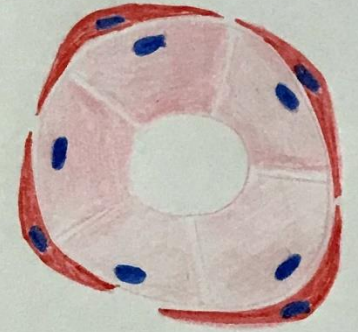
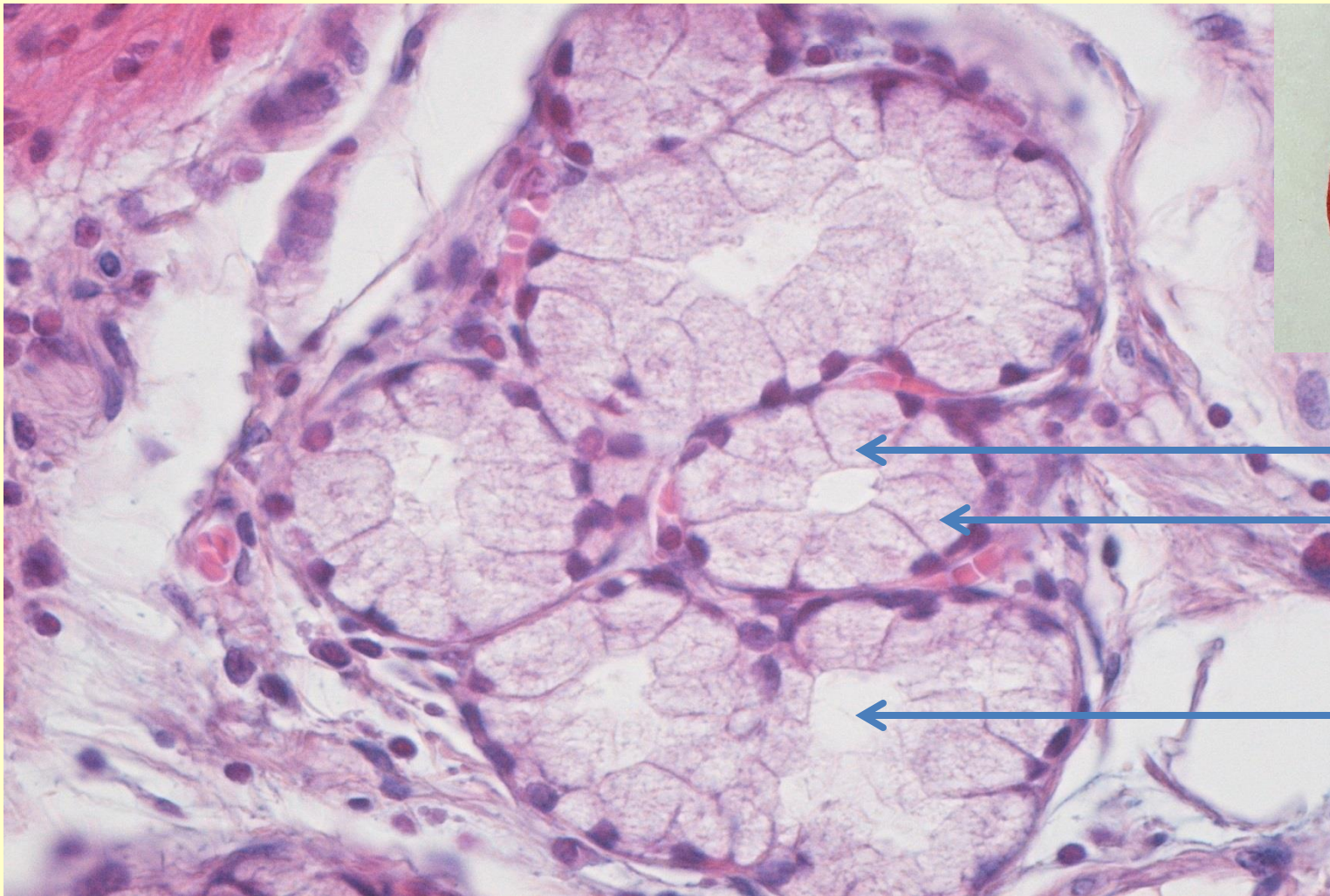
Schiță realizată de Dr. Istrate-Ofițeru Anca-Maria



Acini mucosi. Coloratie Hematoxilina-Eozina

Glande acinoase

Acinul mucos



Pol apical

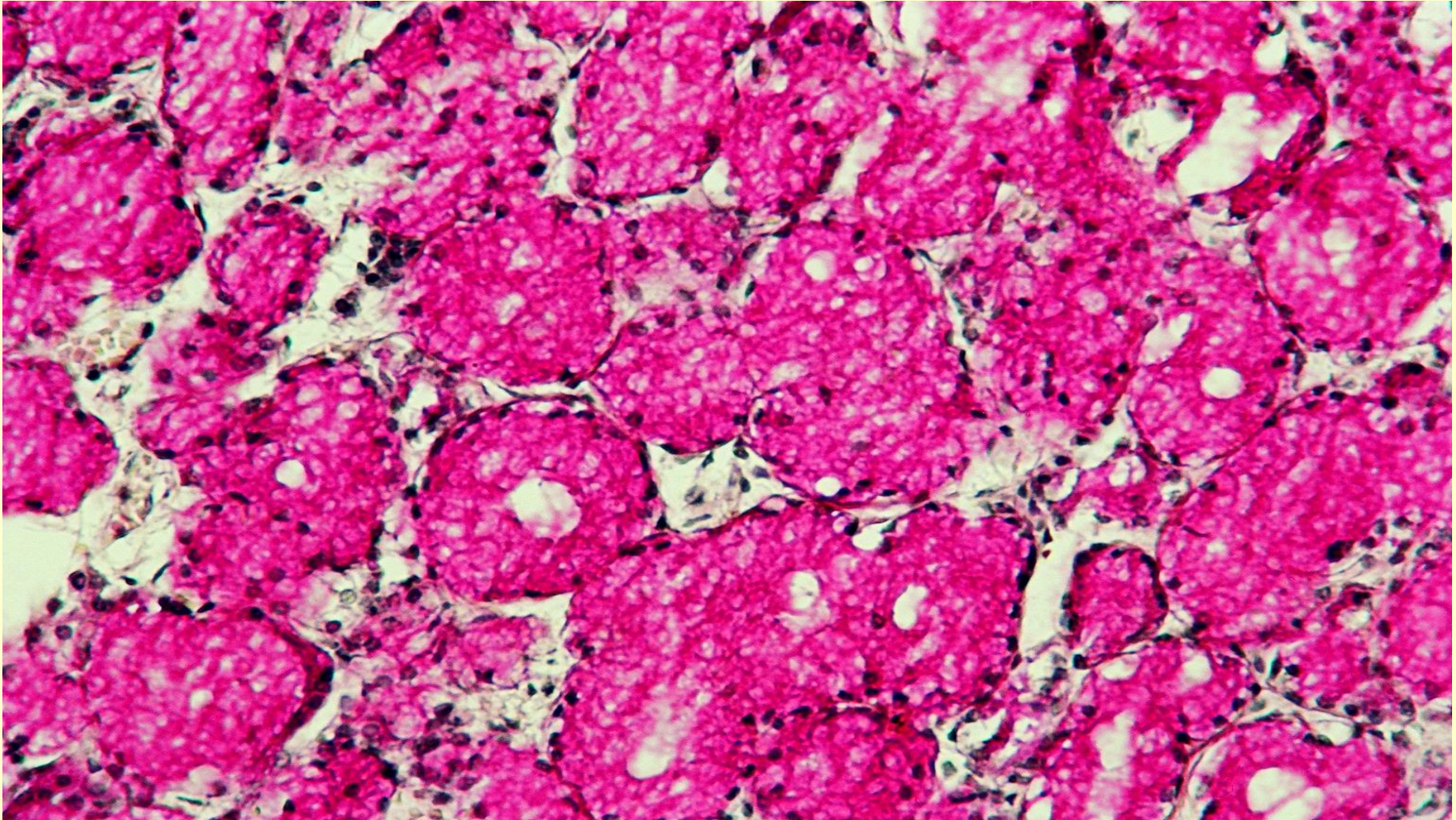
Pol bazal

Lumen

Acini mucosi, Coloratie Hematoxilina-Eozina

Glande acinoase

Acinul mucos

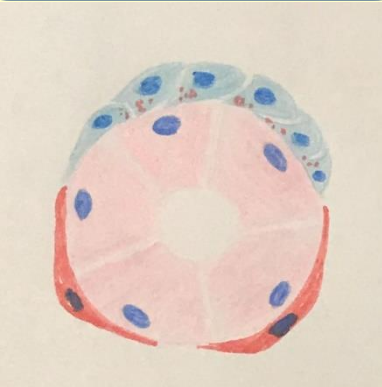
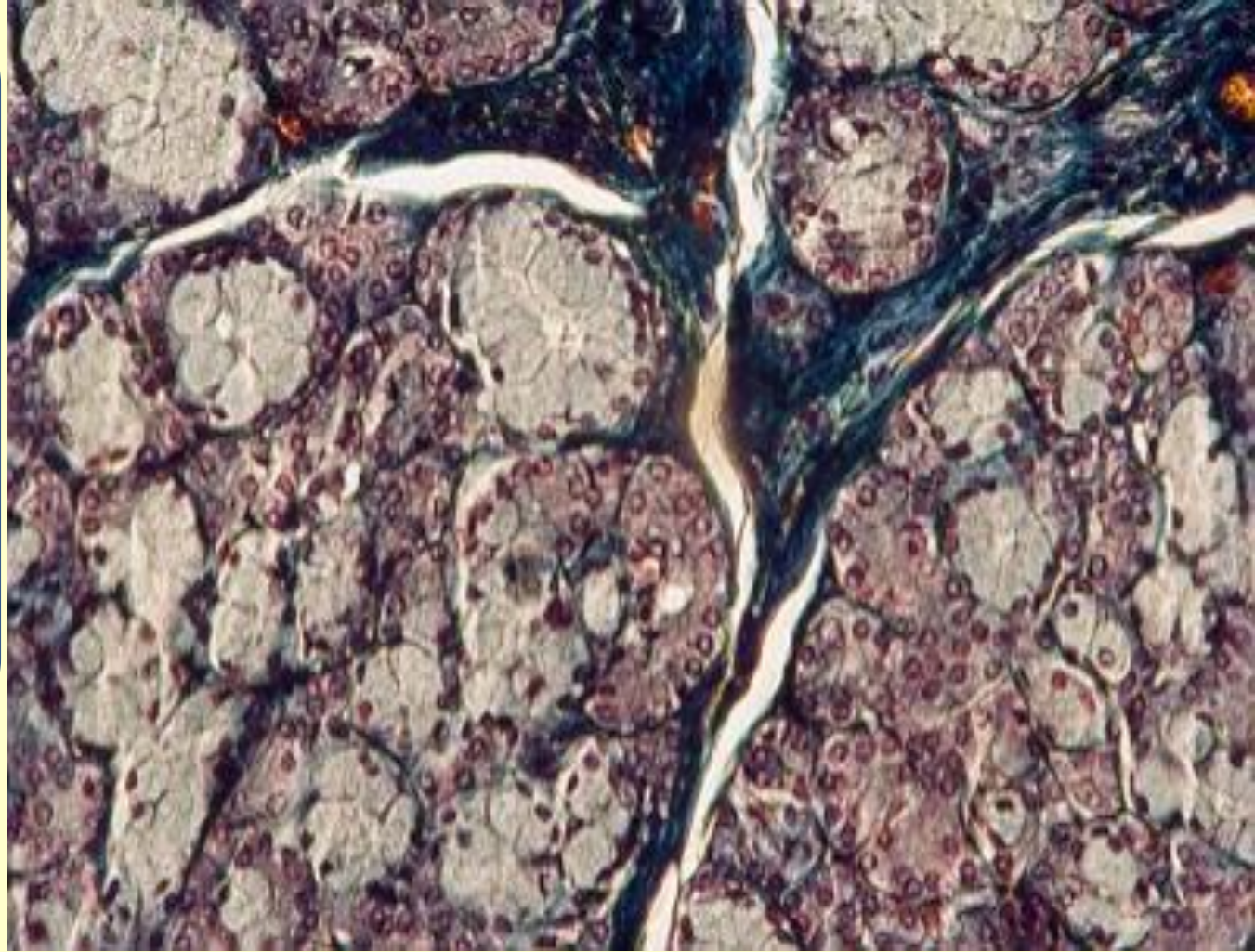


Acini mucosi, Coloratie Mucicarmin

Glande acinoase

Acini micsti

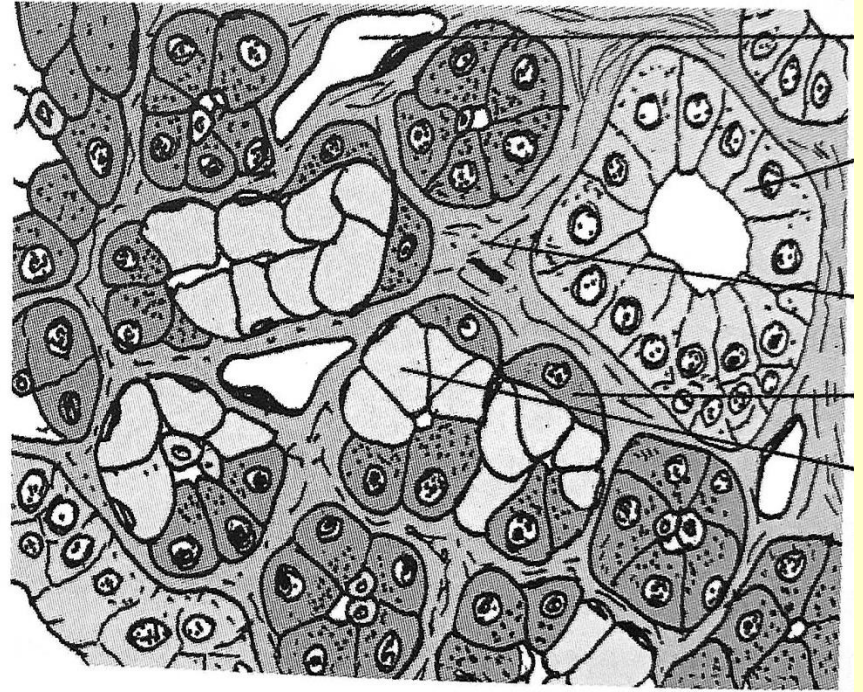
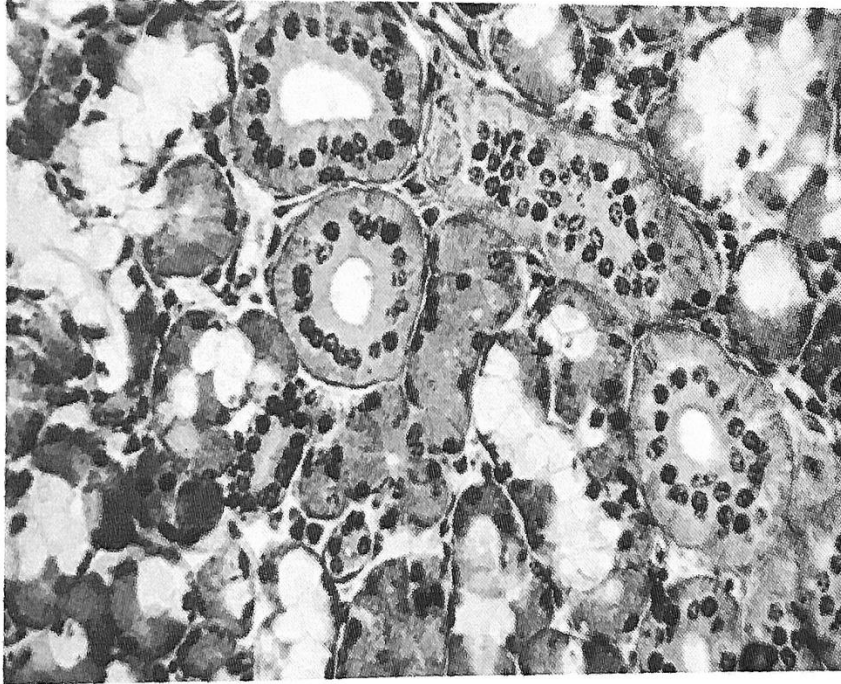
Acinii micsti sunt cei mai mari acini, au forma ovalara si sunt alcatuiti atat din celule mucoase cat si din celule seroase. Celulele seroase se grupeaza la un pol al acinului, unde formeaza **semiluna lui Giannuzzi** si participa foarte rar la delimitarea lumenului.



Acini micsti, glanda salivara mixta. Coloratie Tricromic GS

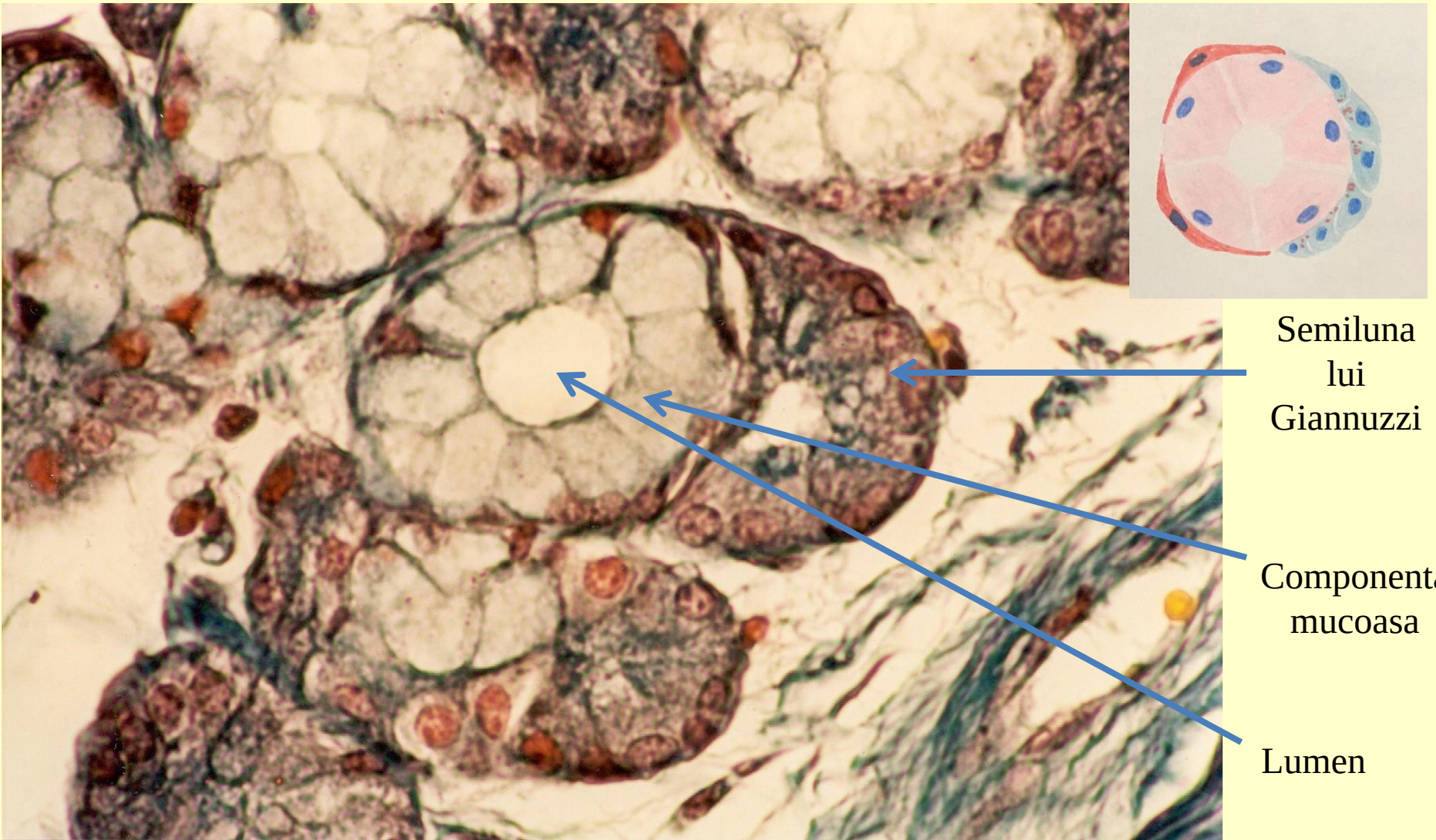
Glande acinoase

Acini micsti



Glande acinoase

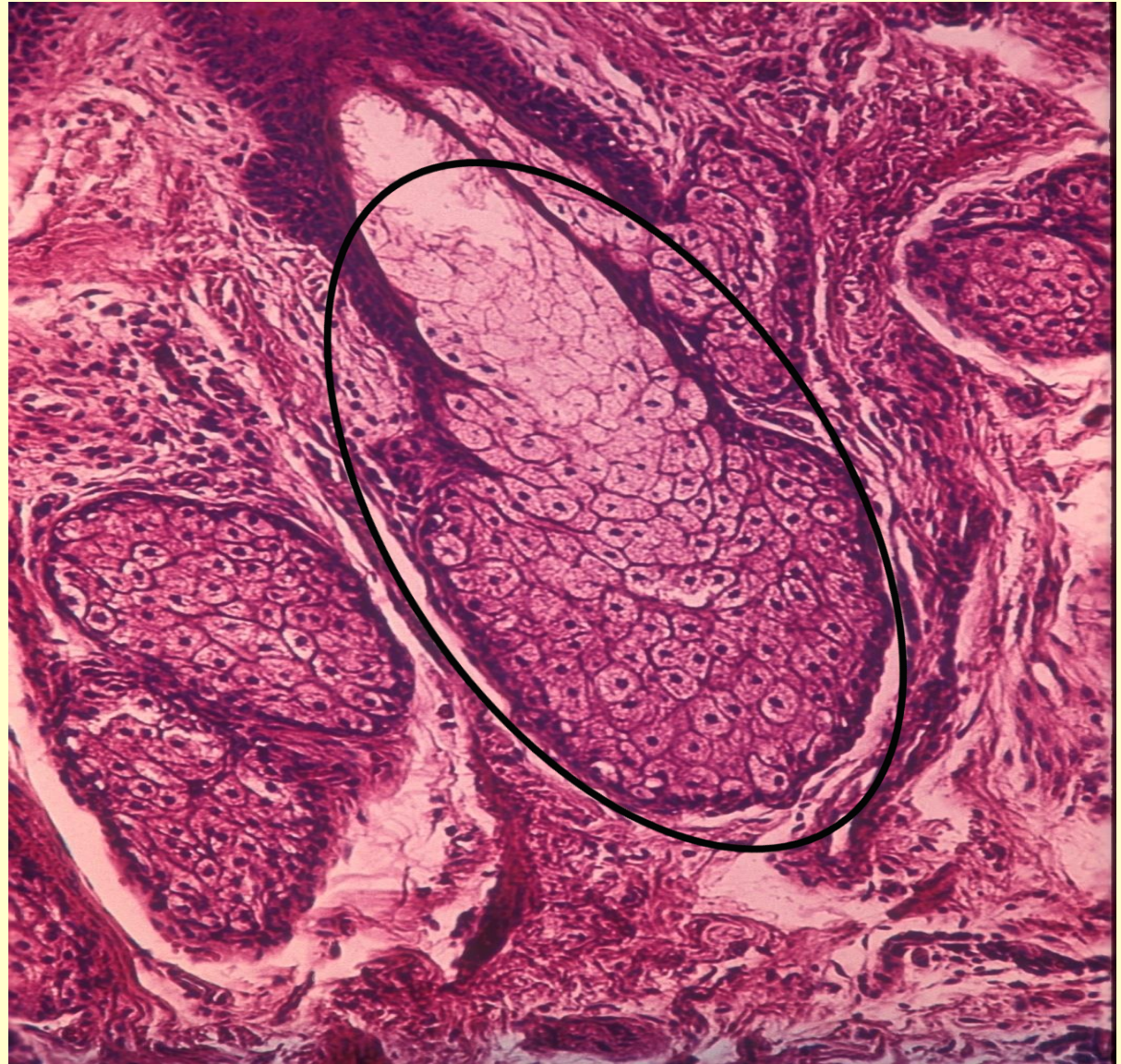
Acini micsti



Acini micsti, glanda salivara mixta. Coloratie Tricromic GS

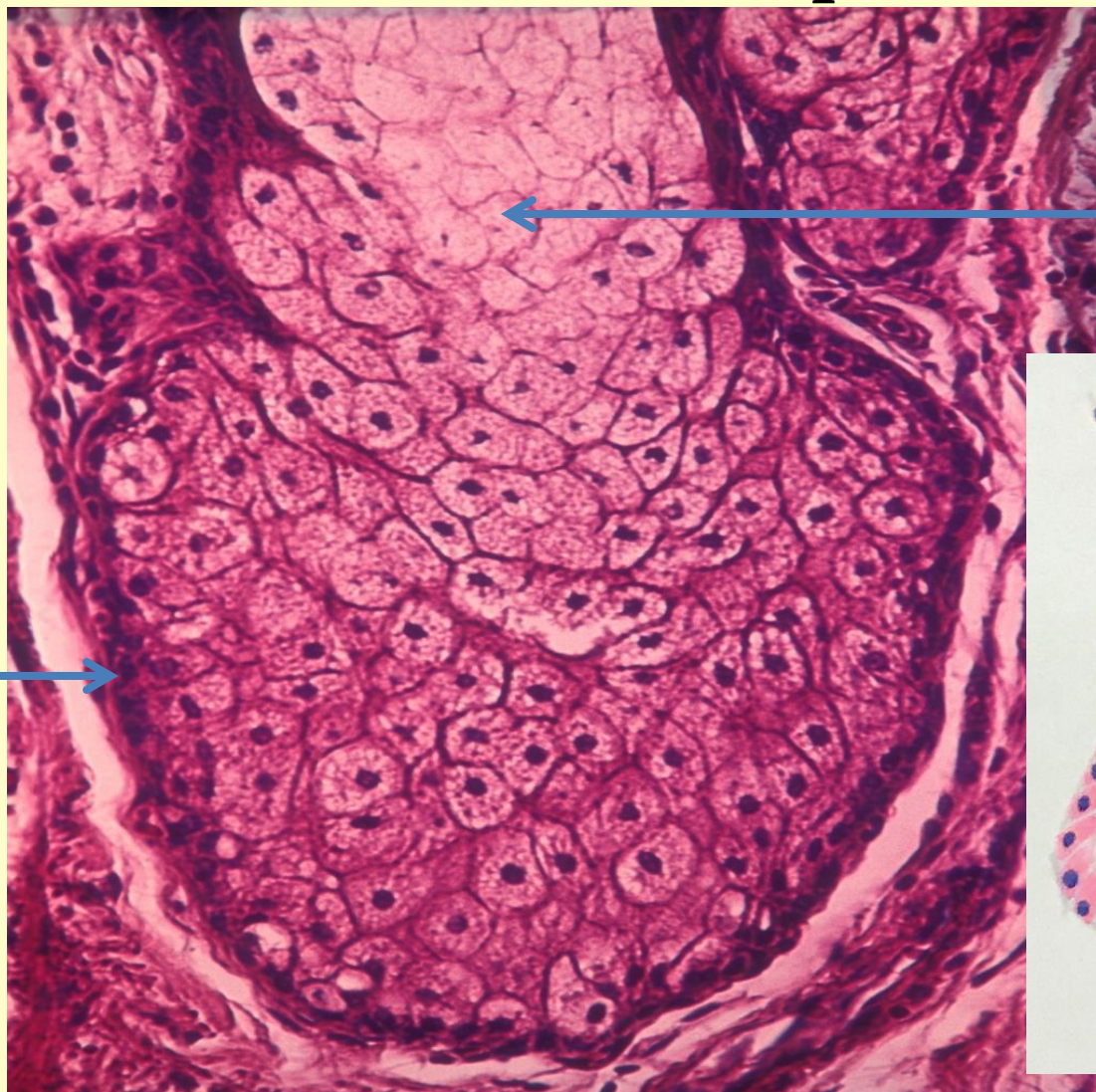
Glanda alveolara plina

Glanda alveolara plina are adenomerul ocupat cu celule care se incarca cu sebum. Este alcatuita dintr-un strat bazal de celule cubice cu activitate proliferativa intensa. Nu are canal excretor, sebumul fiind eliminat la radacina firului de par.



Glanda alveolara plina, glanda sebacee. Coloratie Hematoxilina-Eozina

Glanda alveolara plina



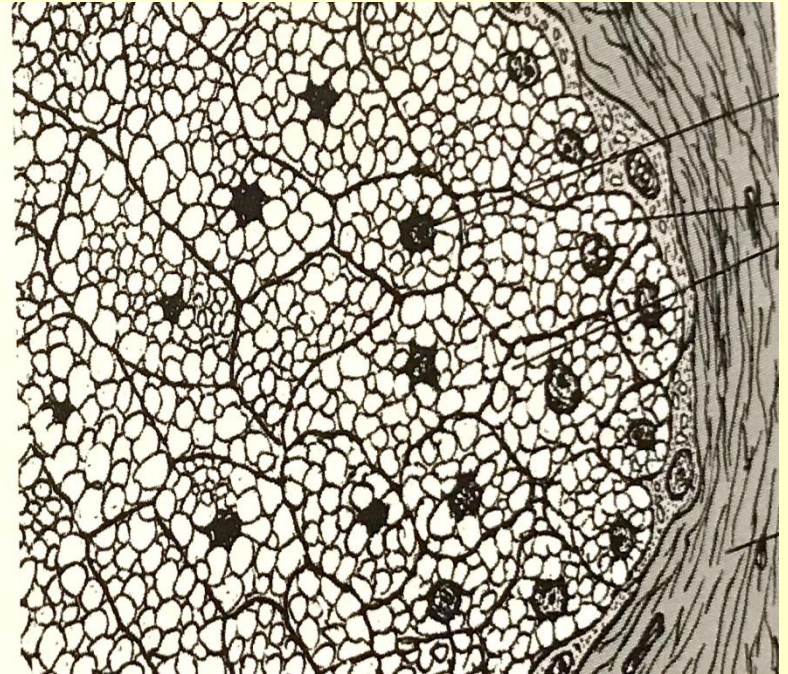
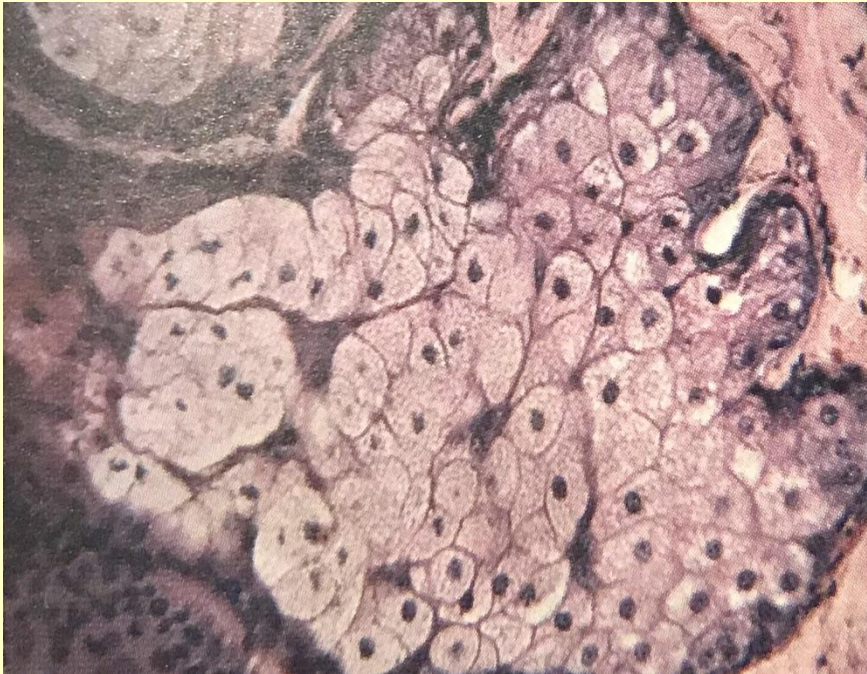
Celule incarcate
cu sebum,
poliedrice, cu
citoplasma clara

Strat bazal



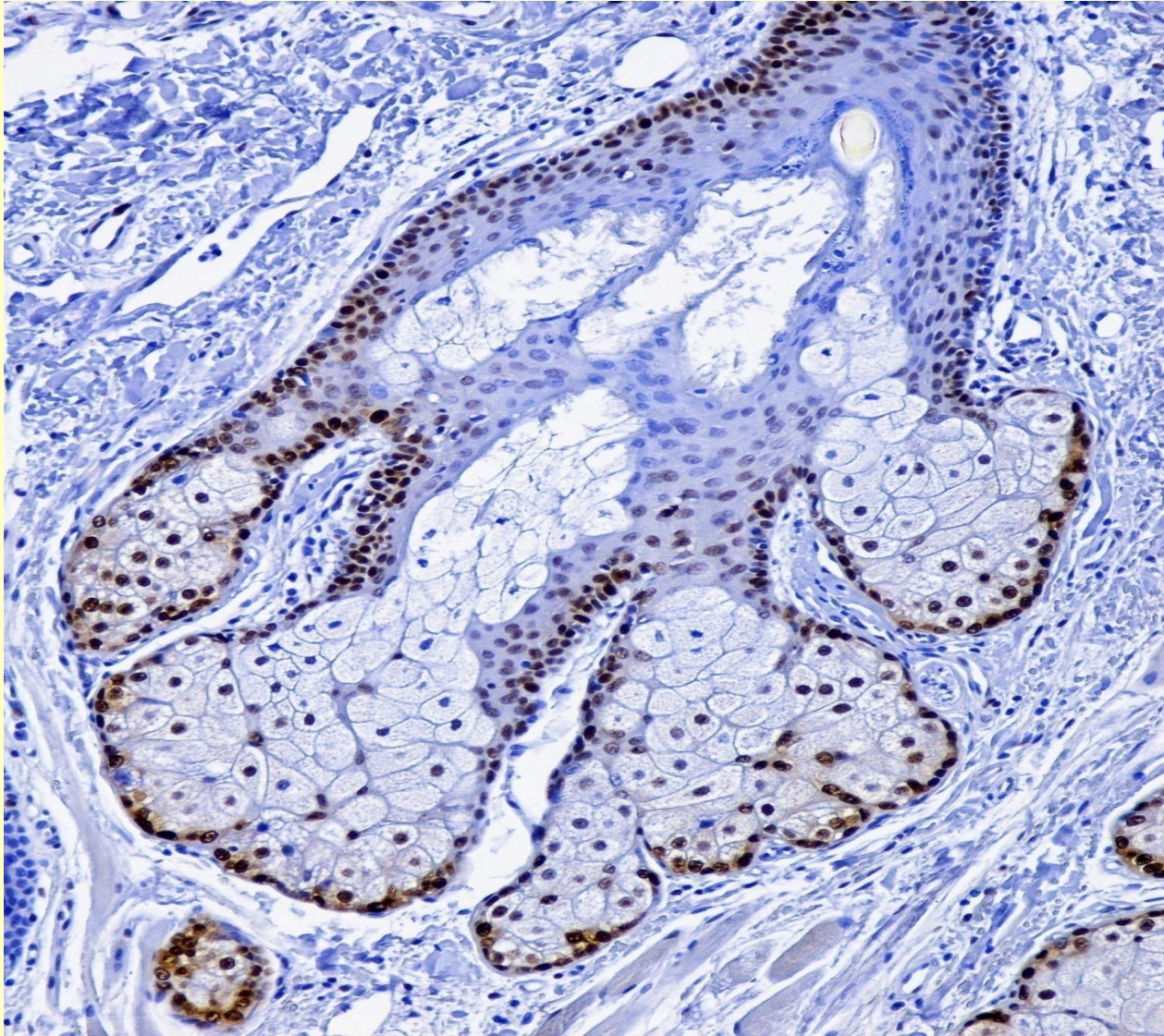
Glanda alveolara plina, glanda sebacee. Coloratie
Hematoxilina-Eozina

Glanda alveolara plina



Glanda alveolara plina, glanda sebacee. Coloratie
Hematoxilina-Eozina

Glanda alveolara plina



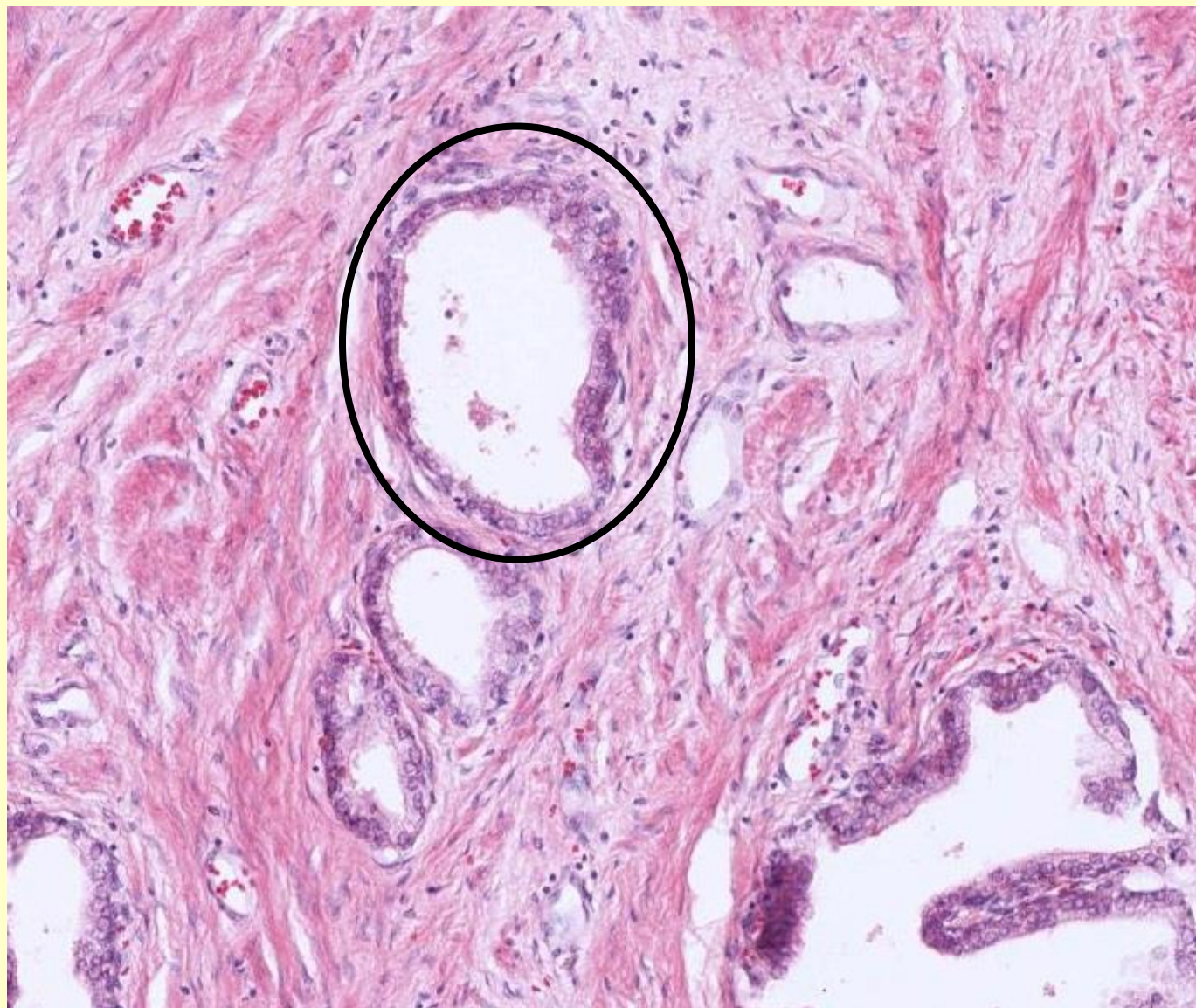
Glanda sebacee, colorare imunohistochimica cu anticorpu anti-PCNA

Glanda alveolara goala

Glanda alveolara goala este reprezentata de prostata, are adenomerii delimitati de un singur rand de celule cilindrice ce vor secreta un produs bogat in mucus, care va fi dizolvat de reactivii utilizati in tehnica histologica astfel ca adenomerii par lipsiti de continut

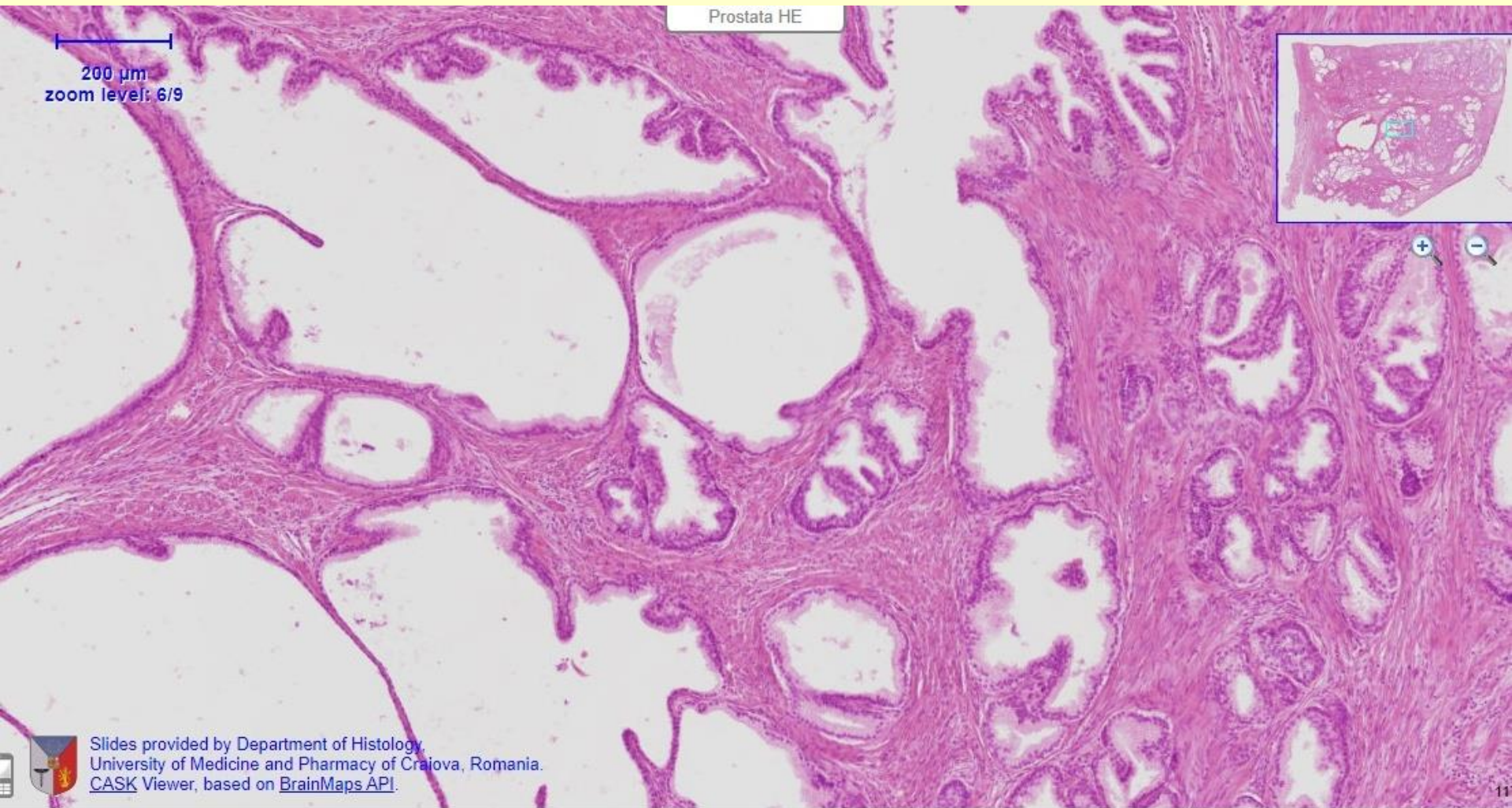
↓

glanda alveolara goala



Glanda alveolara goala, prostata, Coloratie Hematoxilina-Eozina

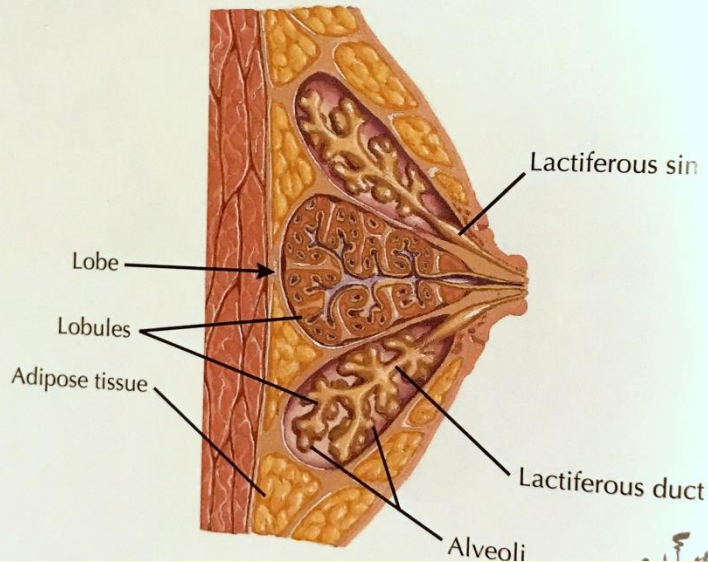
Glanda alveolara goala



Glanda alveolara goala, prostata, Coloratie Hematoxilina-Eozina

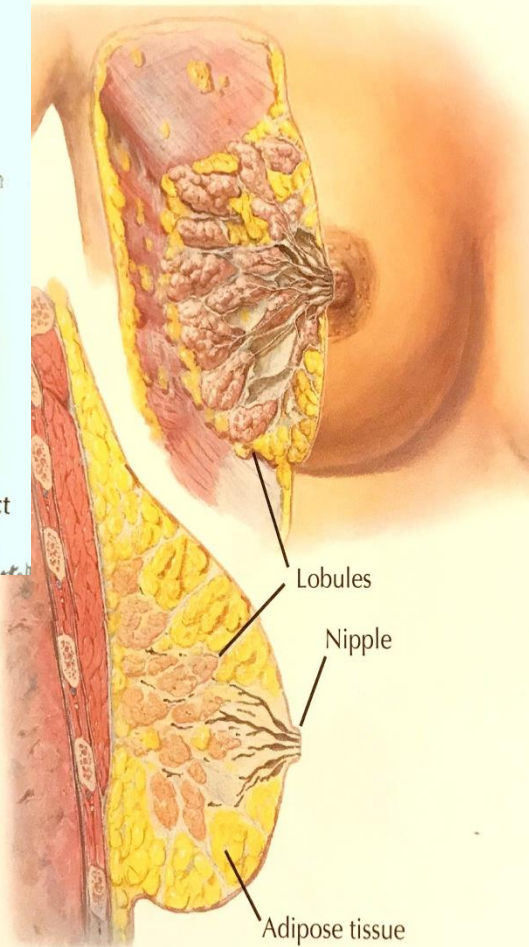
Glanda mamara

▼ **Sagittal view of a mammary gland. Three lobes open separately by ducts into the nipple.** Each lobe contains many smaller lobules, which are secretory units of this compound tubuloalveolar gland.



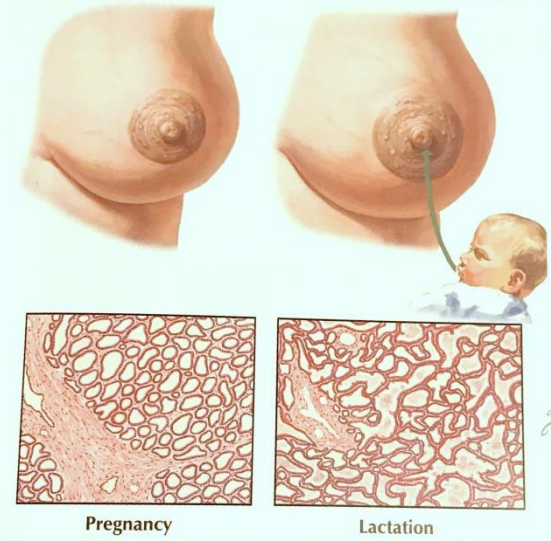
▼ **Position and structure of mammary gland.**

Anterolateral dissection

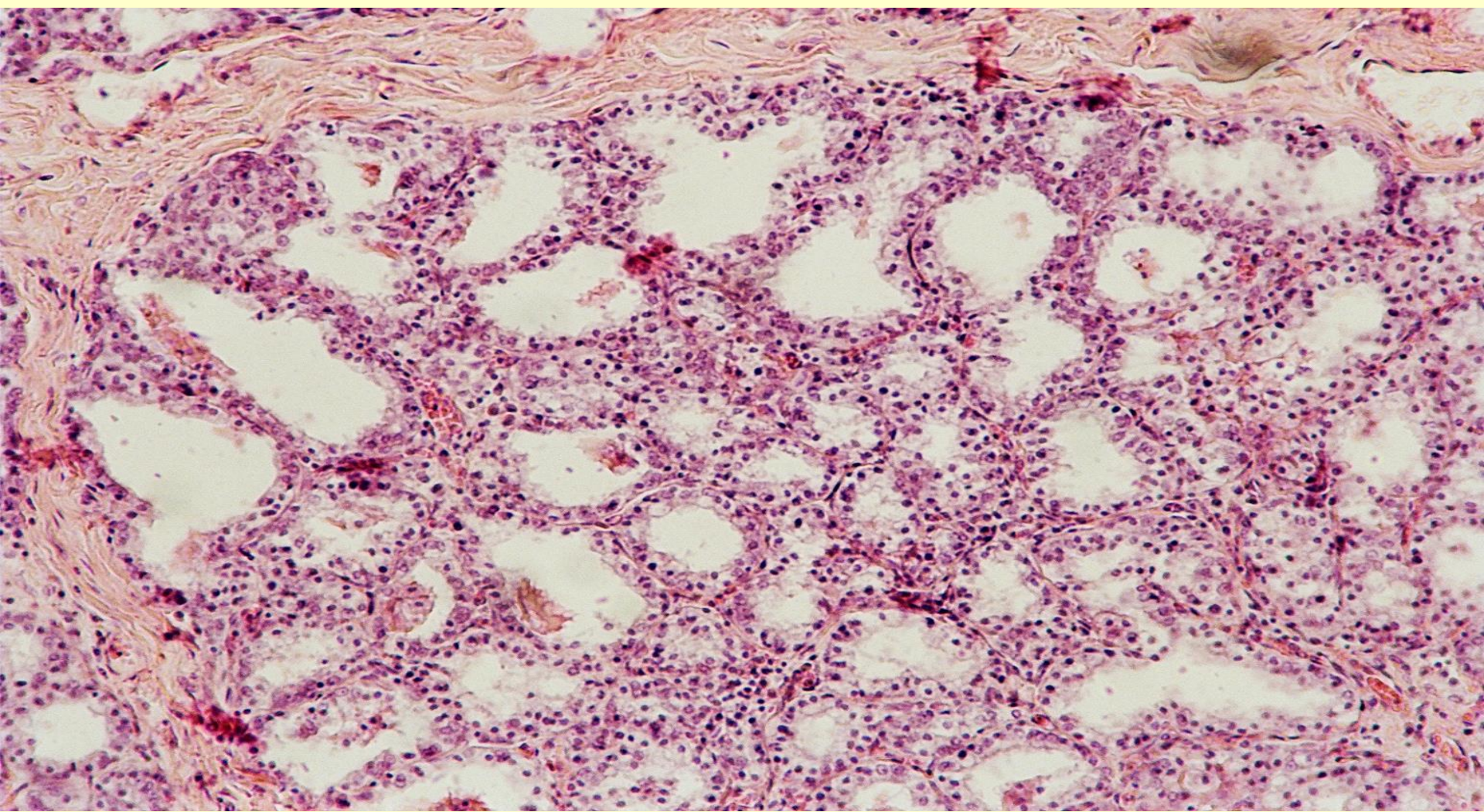


Sagittal section

▼ **Functional changes and lactation.**

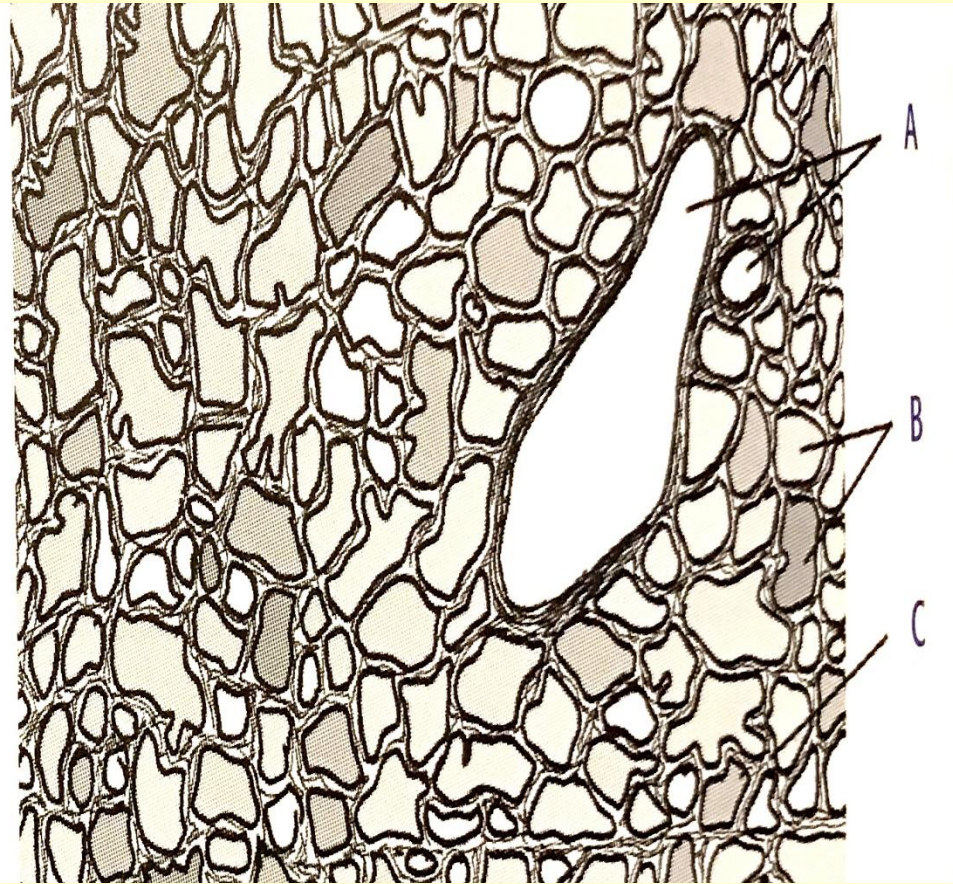
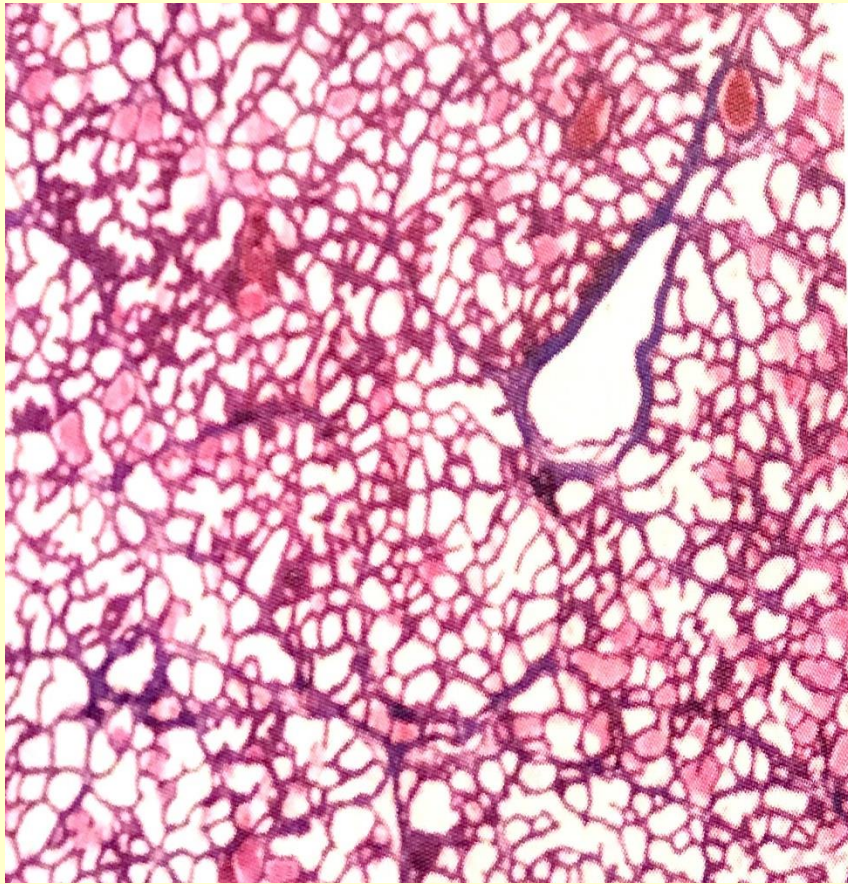


Glanda tubulo-alveolara



Glanda mamara in lactatie, coloratie Hematoxilina-Eozina

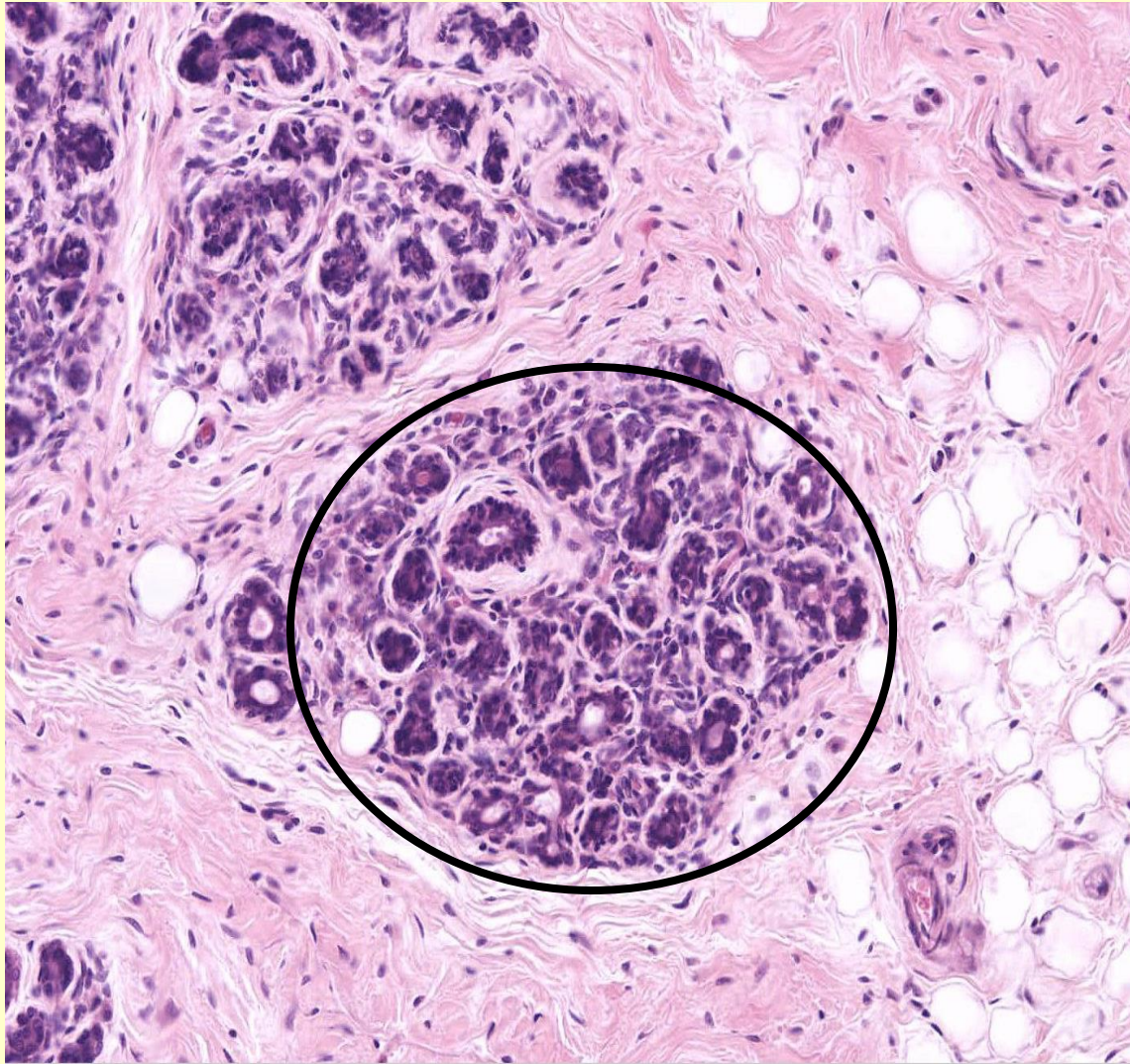
Glanda tubulo-alveolara



Glanda mamara in lactatie, schita

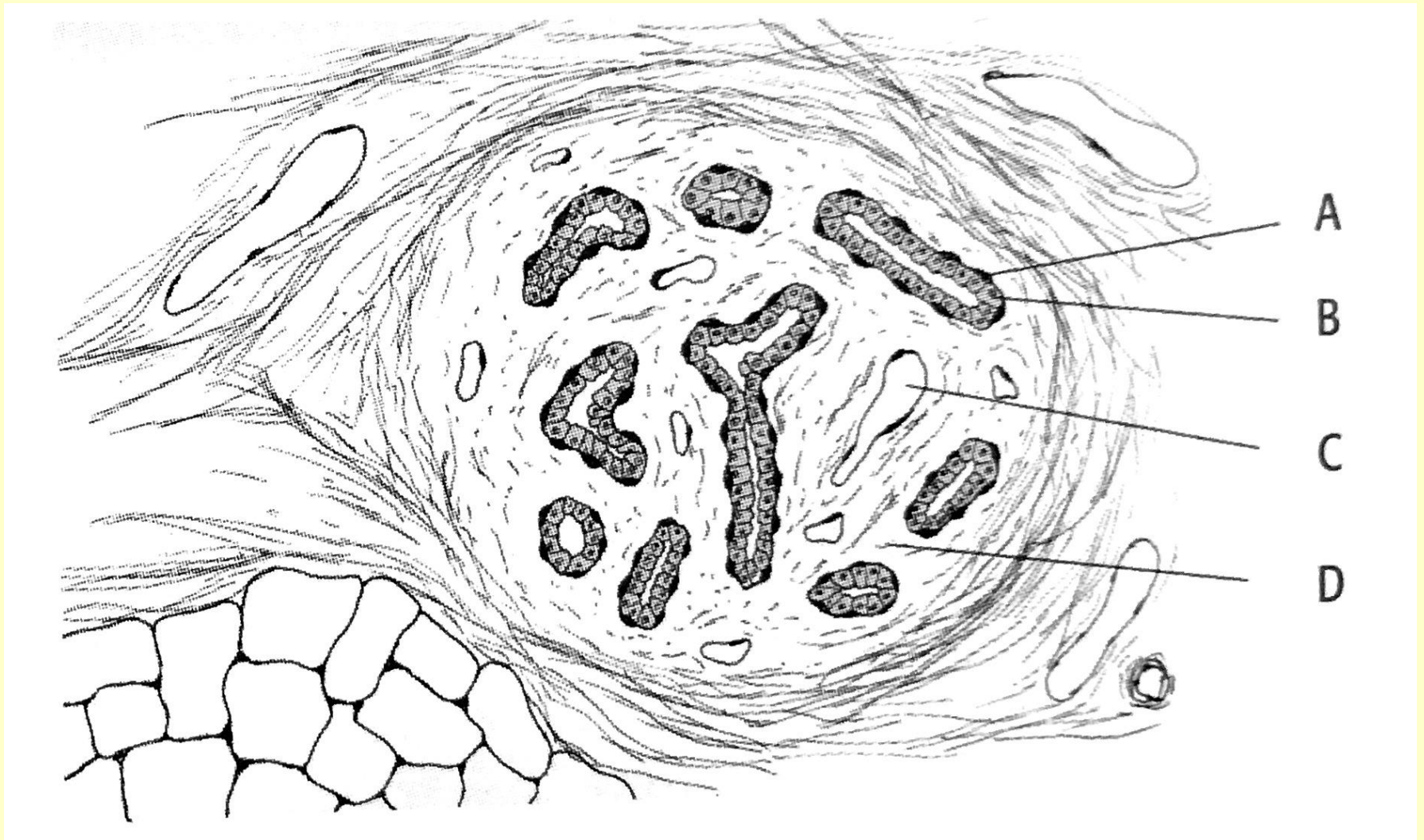
A. Vas de sange, B. Glande tubulo-alveolare, C. tesut conjunctiv intralobular

Glanda tubulo-acinoasa



Glanda mamara in repaus, coloratie Hematoxilina-Eozina

Glanda tubulo-acinoasa



Glanda mamara in repaus, schita.

A. Celule mioepiteliale, B. Celule secretorii, C. vas de sange, D. tesut conjunctiv intralobular.

Epitelii glandulare exocrine

Dupa **aspectul canalului excretor** se clasifica in:

Glande simple

gld sudoripare, gld fundice, gld Lieberkuhn

Glande compuse

gld salivare, pancreasul exocrin

Glande agminate

gld mamare, prostata

Epitelii glandulare exocrine

Dupa modalitatea de **eliminare a produsului de secretie** se clasifica in:

Glande merocrine

Pancreasul exocrin
Glandele salivare

Glande holocrine

Glanda sebacee

Glande apocrine

Glanda mamara

Epitelii glandulare endocrine

Dupa criteriul **morfologic** se clasifica in:

Glande veziculoase

Au parenchimul format din vezicule usor neregulate, tapetate de un epiteliu simplu cubic ce delimiteaza o cavitate ocupata de produsul de secretie.

Tiroida
Hipofiza intermediara

Glande cordonale

Sunt formate din celule poliedrice aranjate sub forma de cordoane, seprate de spatii conjunctive bogate in vase de sange

Adenohipofiza
Paratiroidale
Glanda suprarenala

Glande interstitiale

Sunt formate din celule izolate sau grupate in numar mic, raspandite in tesutul conjunctiv al unui organ

Glanda interstitiala a testiculului
Glanda interstitiala a ovarului

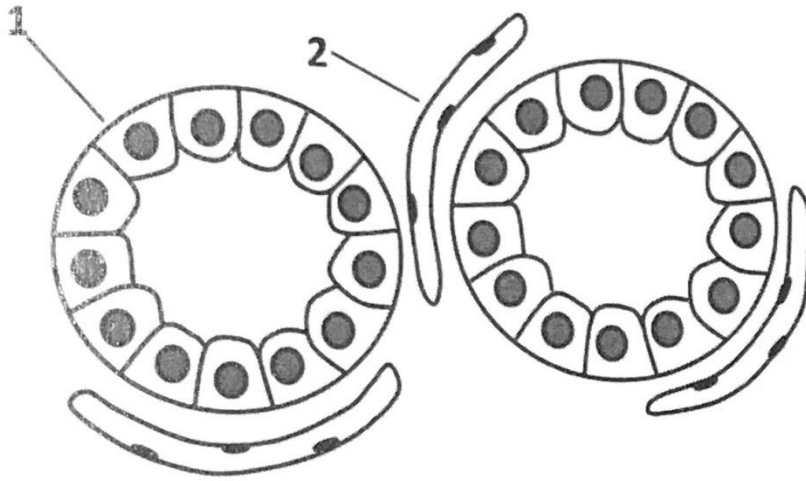
Glanda veziculoasa



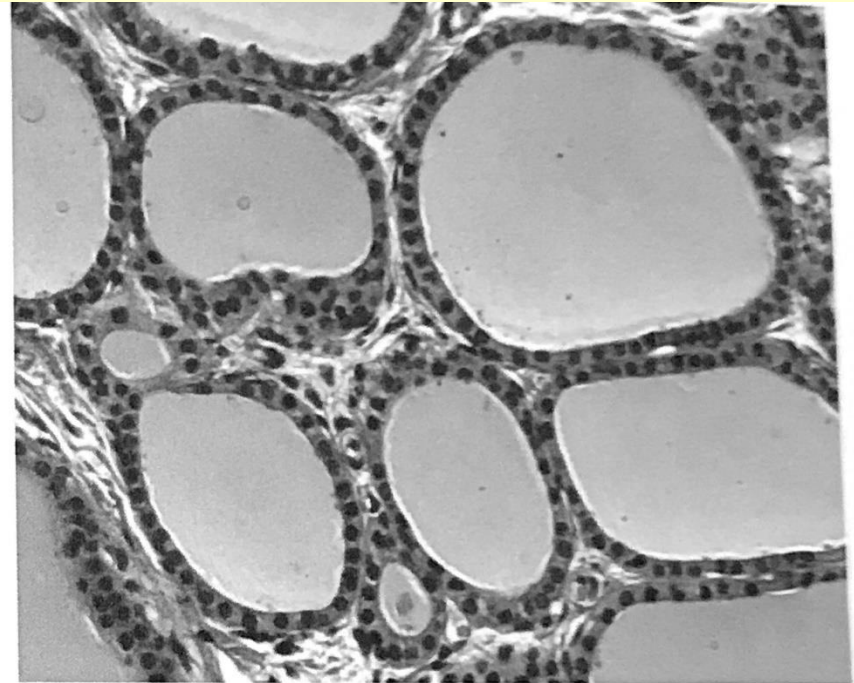
Lumenul foliculului tiroidian
ocupat de coloid

Epiteliu simplu cubic, foliculi tiroidieni, Coloratie Tricromic GS

Glanda veziculoasa



A

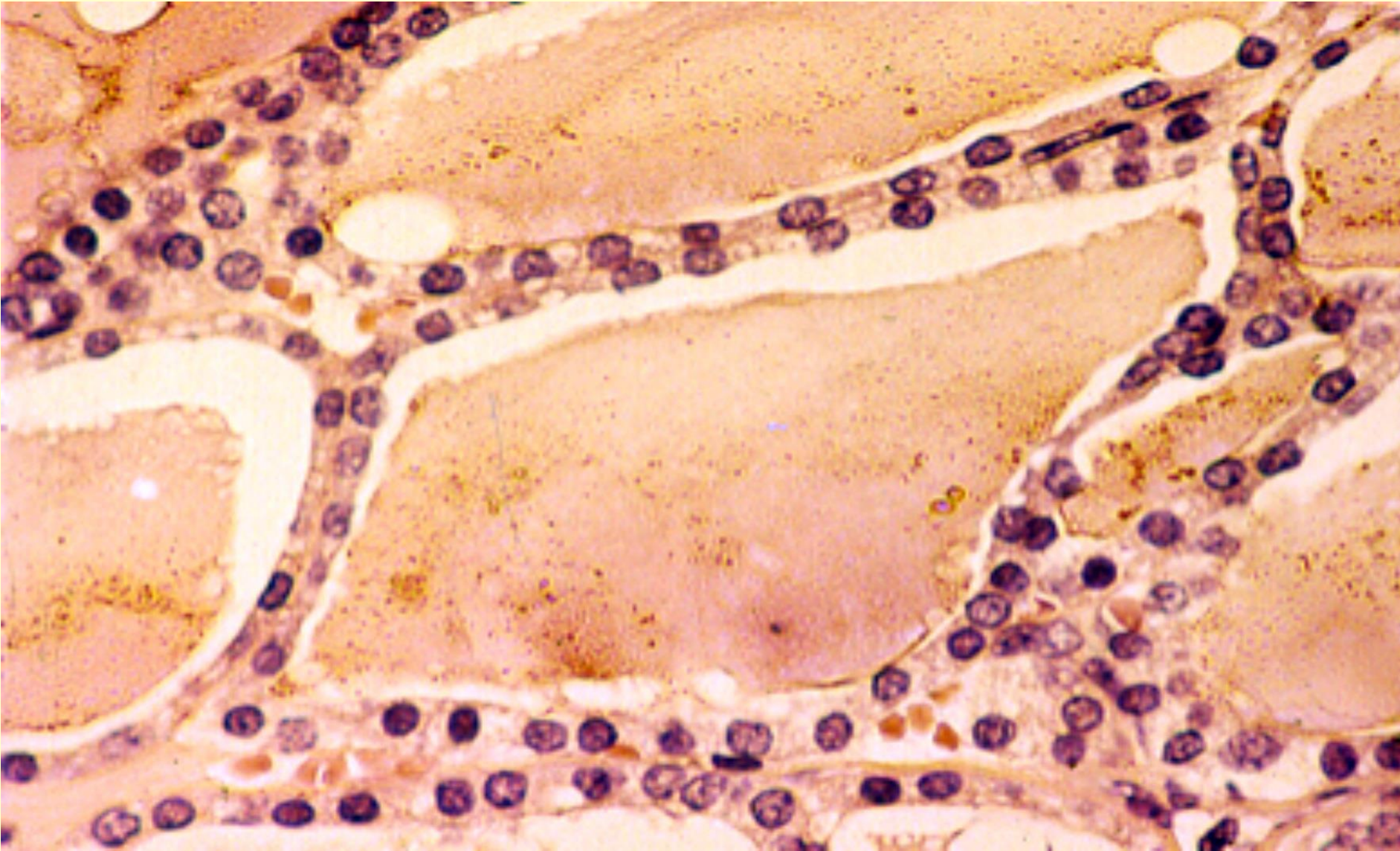


B

Figura 48. Celule endocrine dispuse în foliculi.

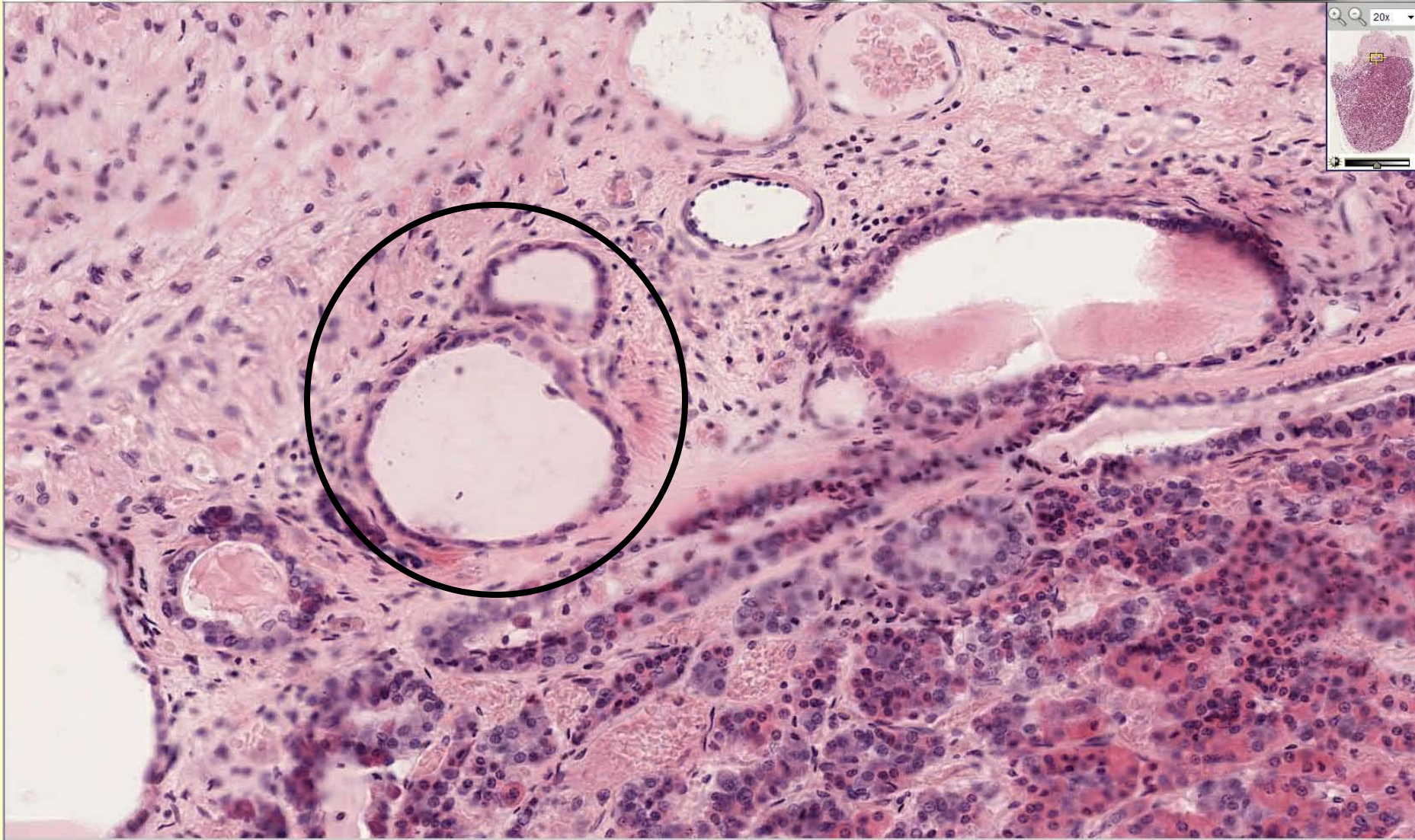
A. Reprezentare schematică: 1 – celule endocrine, 2 – capilar sanguin; B. Imagine histologică, tiroida.

Glanda veziculoasa



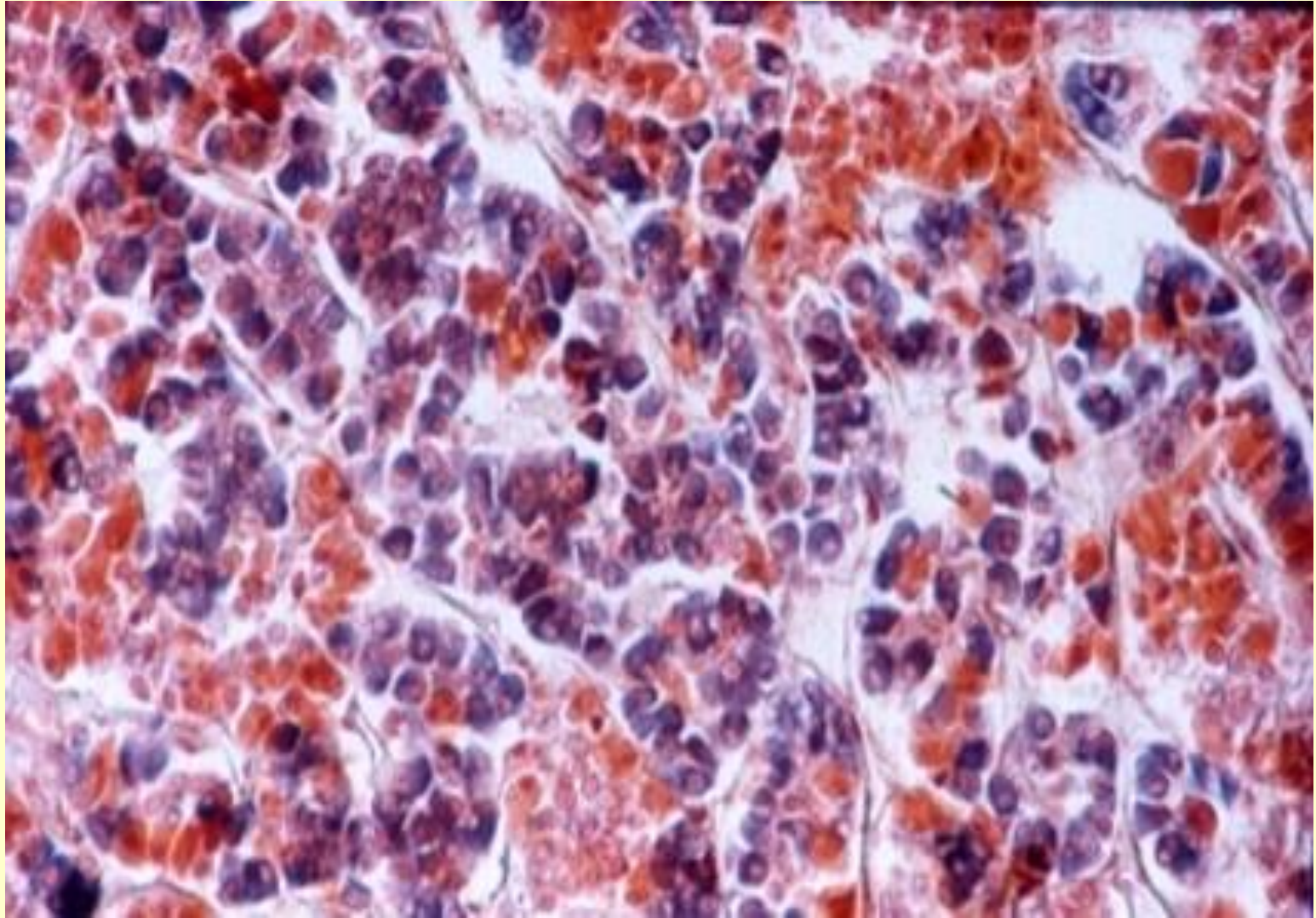
Epiteliu simplu cubic, foliculi tiroidieni, Coloratie Hematoxilina-Eozina

Glanda veziculoasa



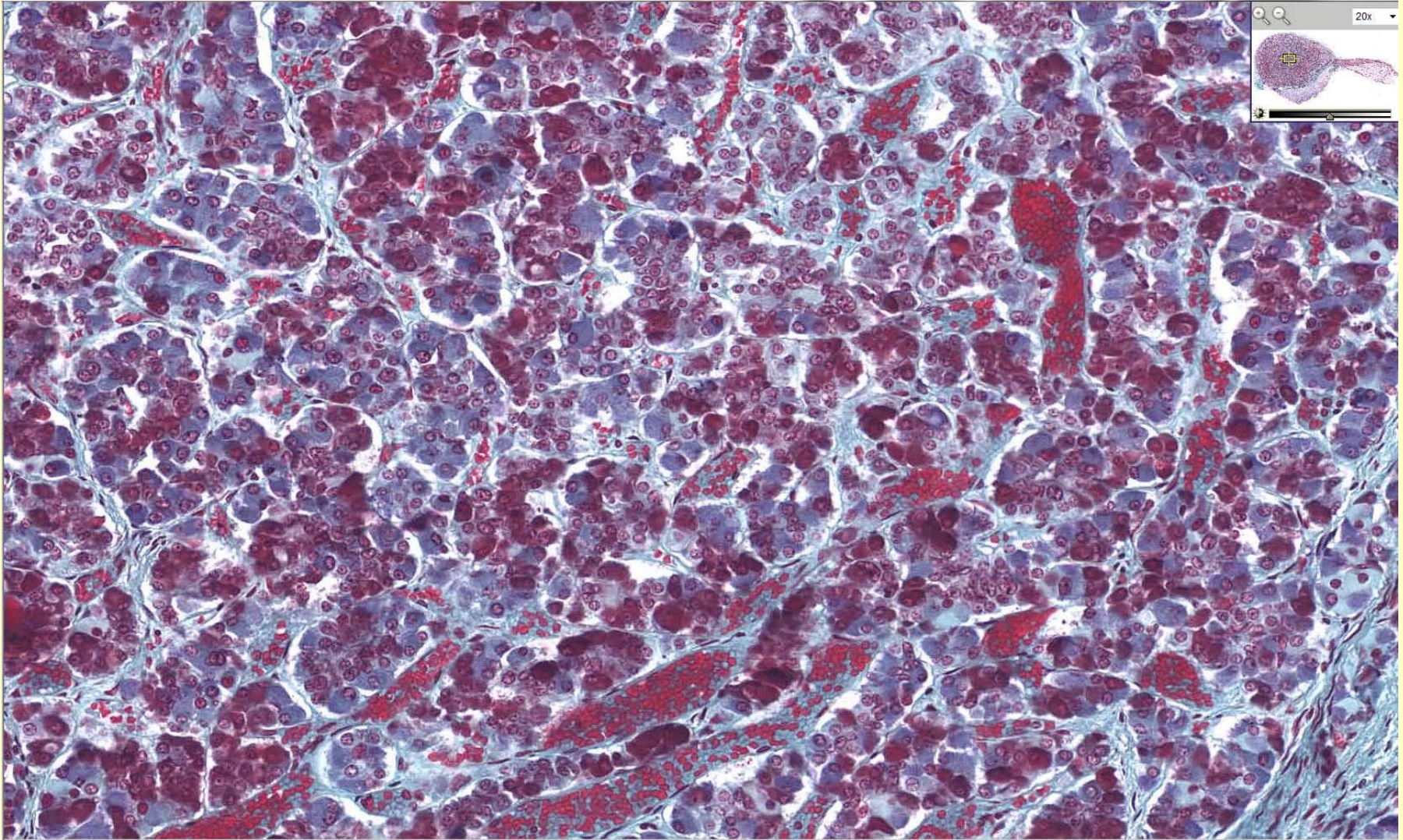
Glanda veziculoasa, hipofiza intermediara, Coloratie Hematoxilina-Eozina

Glanda cordonala



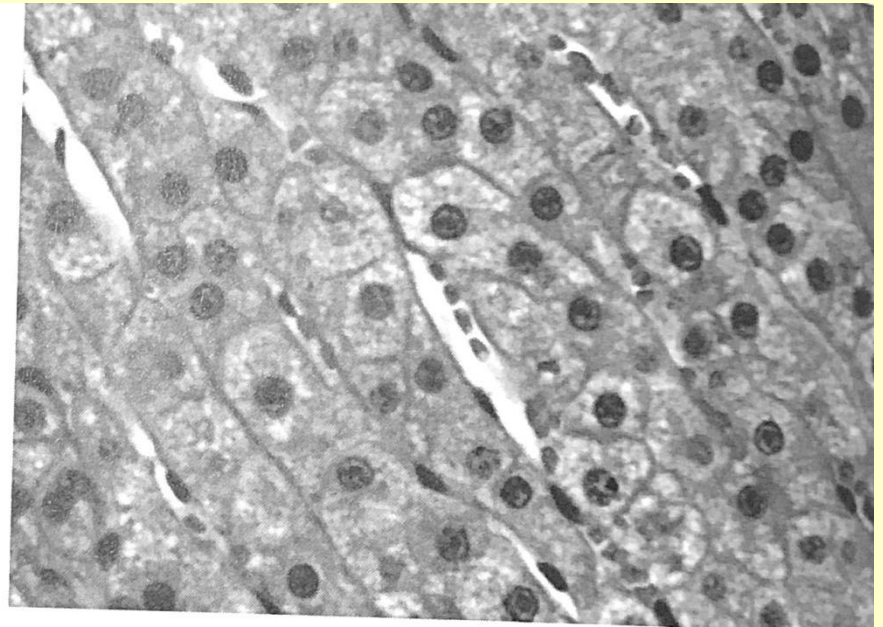
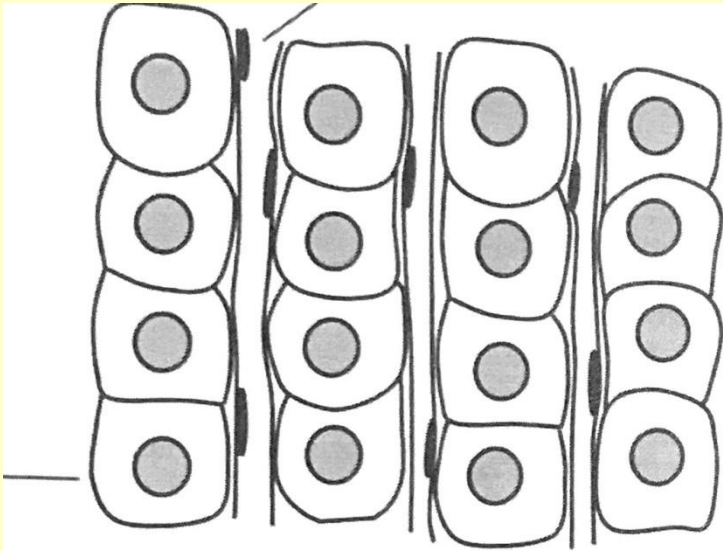
Glanda cordonala, Adenohipofiza, Coloratie Hematoxilina-Eozina

Glanda cordonala



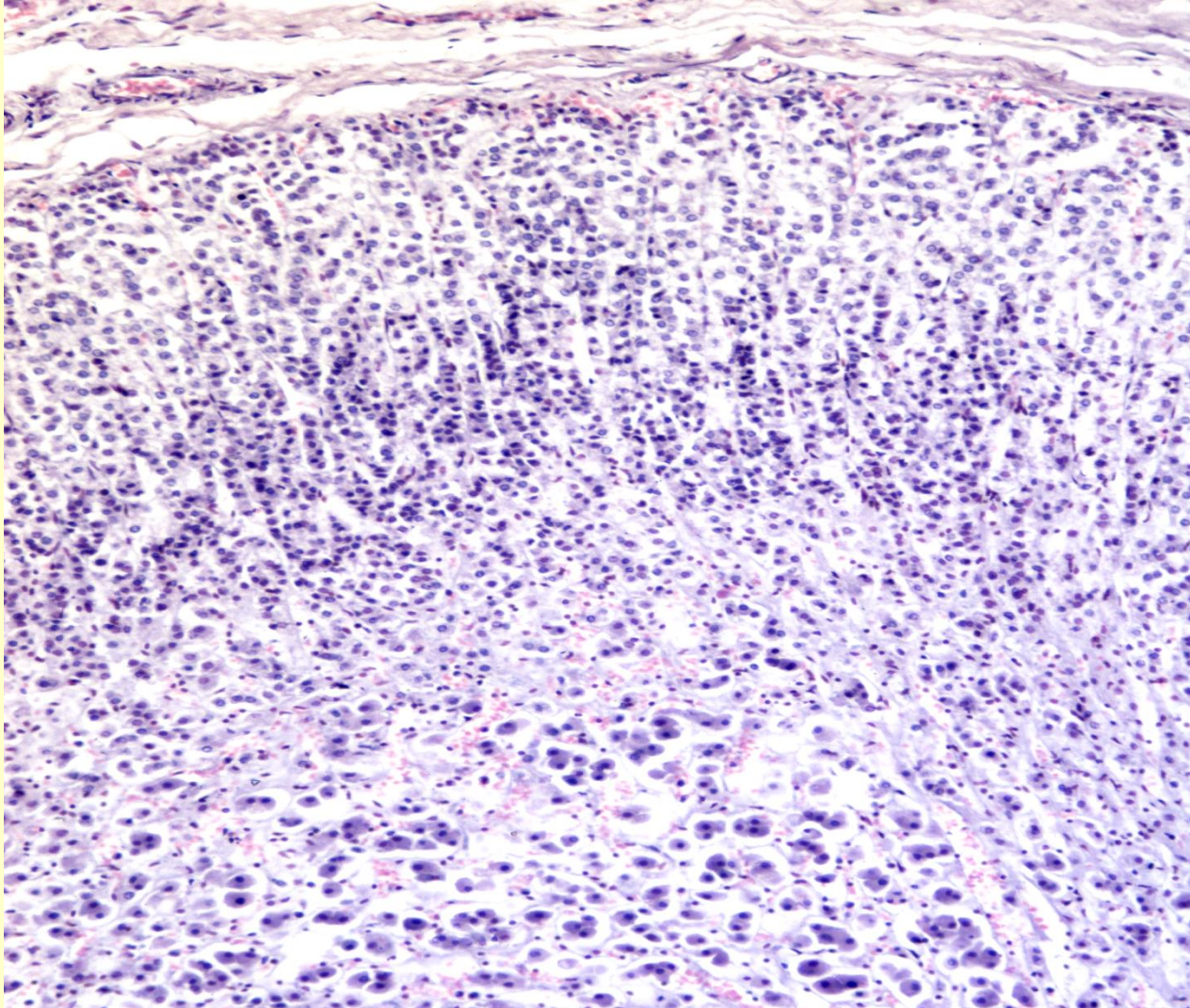
Glanda cordonala, adenohipofiza, Coloratie Tricromic Masson

Glanda cordonala



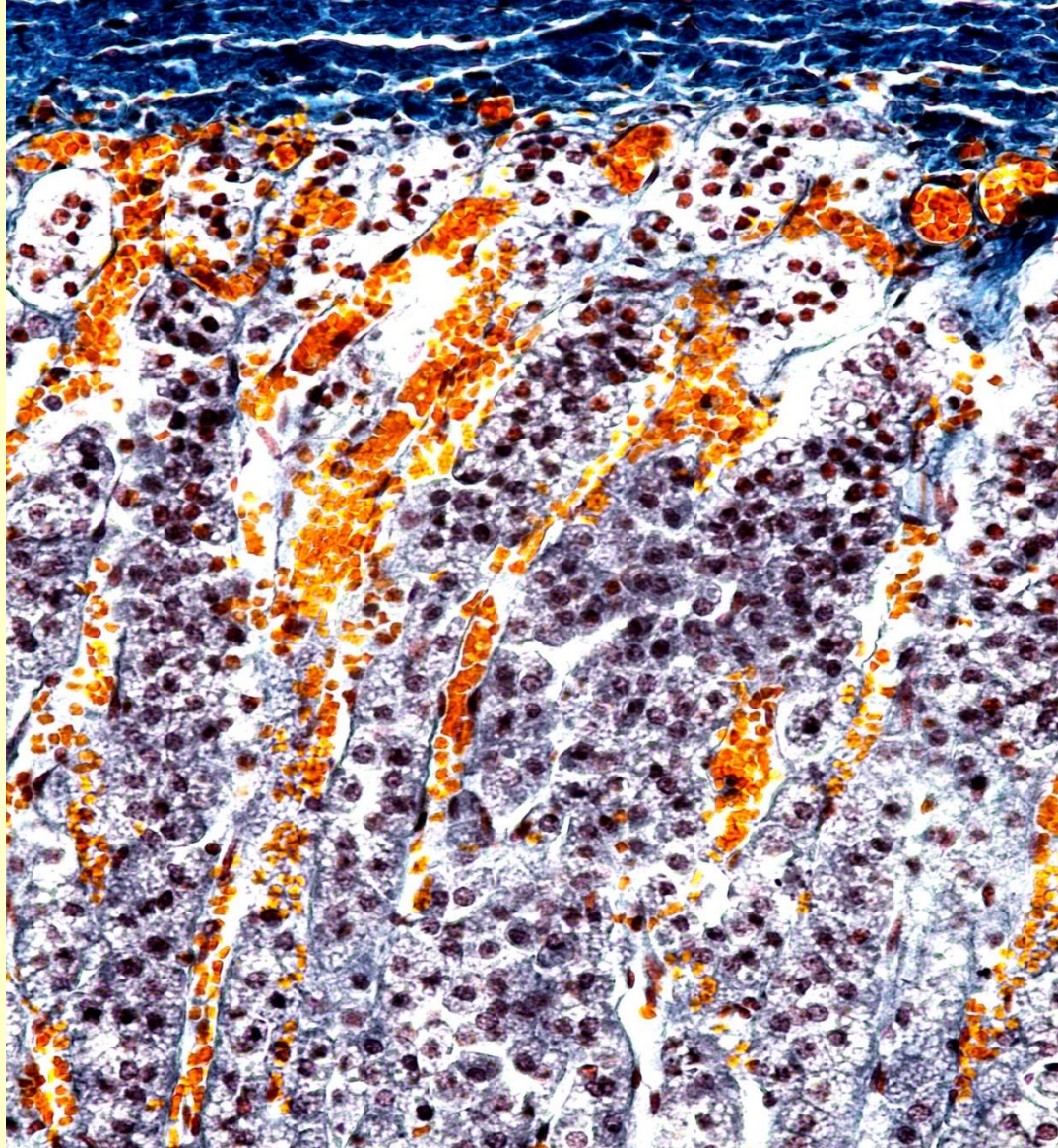
Glanda cordonala - schita

Glanda cordonala



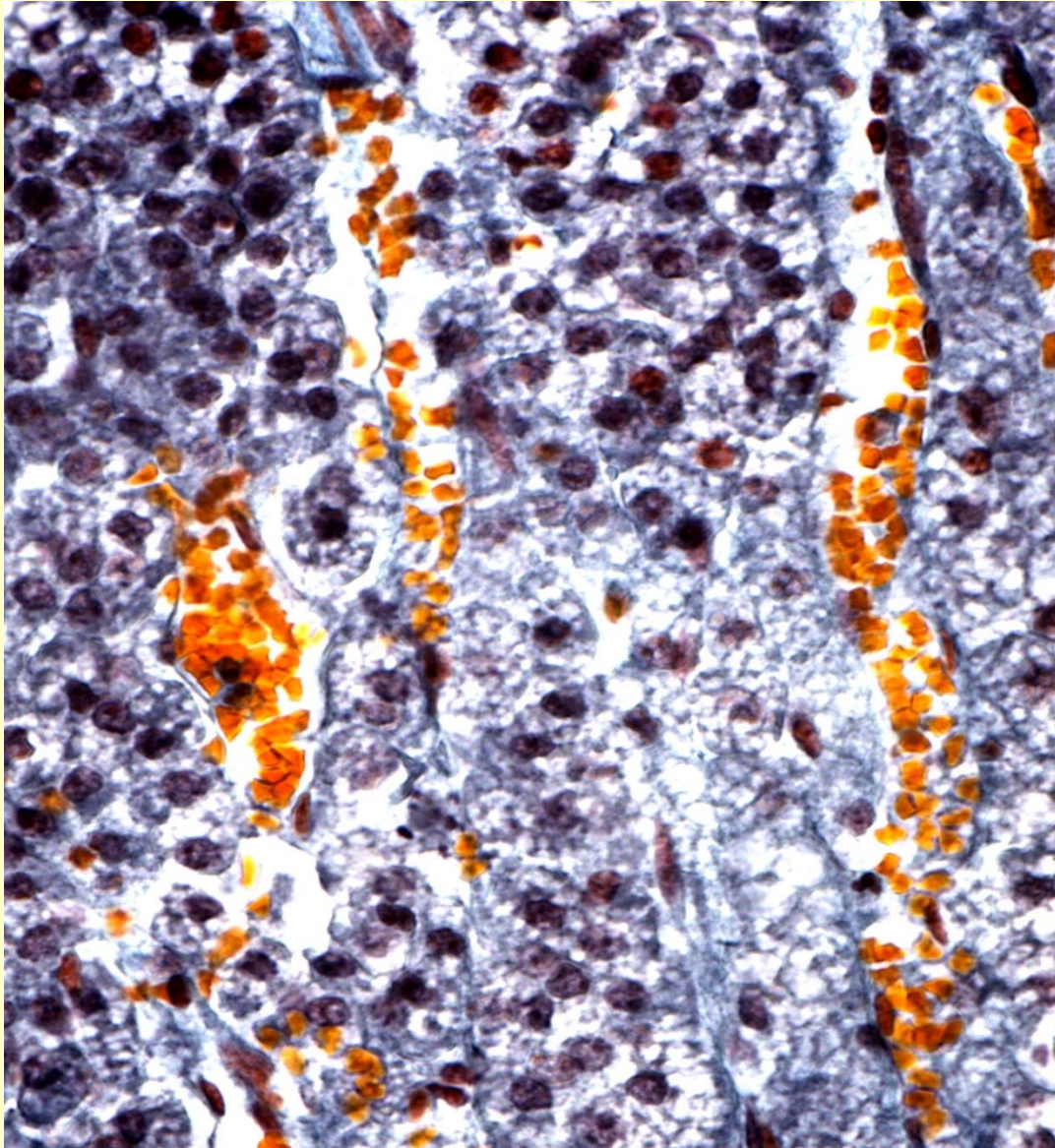
Glanda cordonala, glanda suprarenala, coloratie Hematoxilina-Eozina

Glanda cordonala



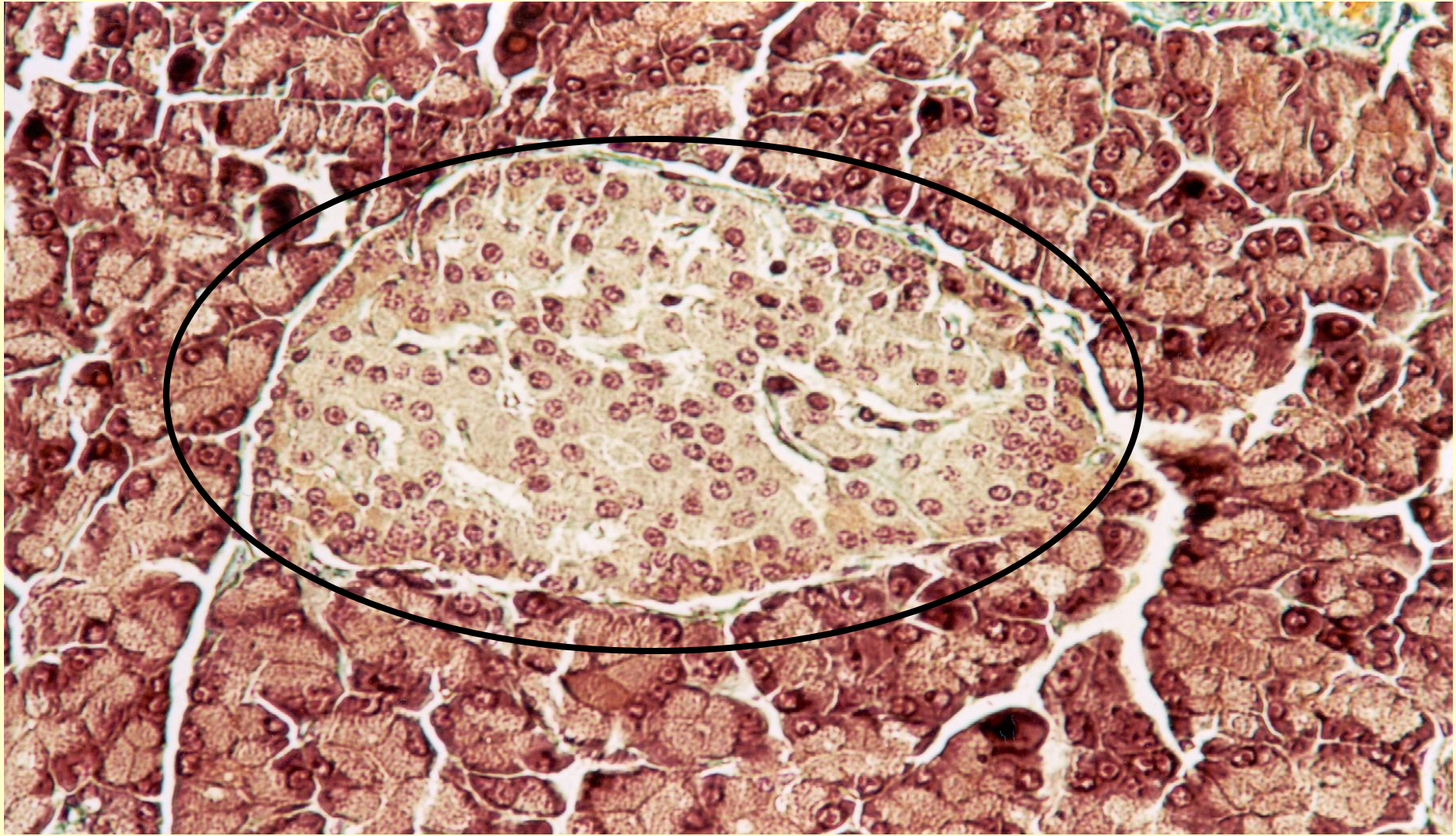
Glanda cordonala, corticosuprarenala, Coloratie
Tricromic GS

Glanda cordonala



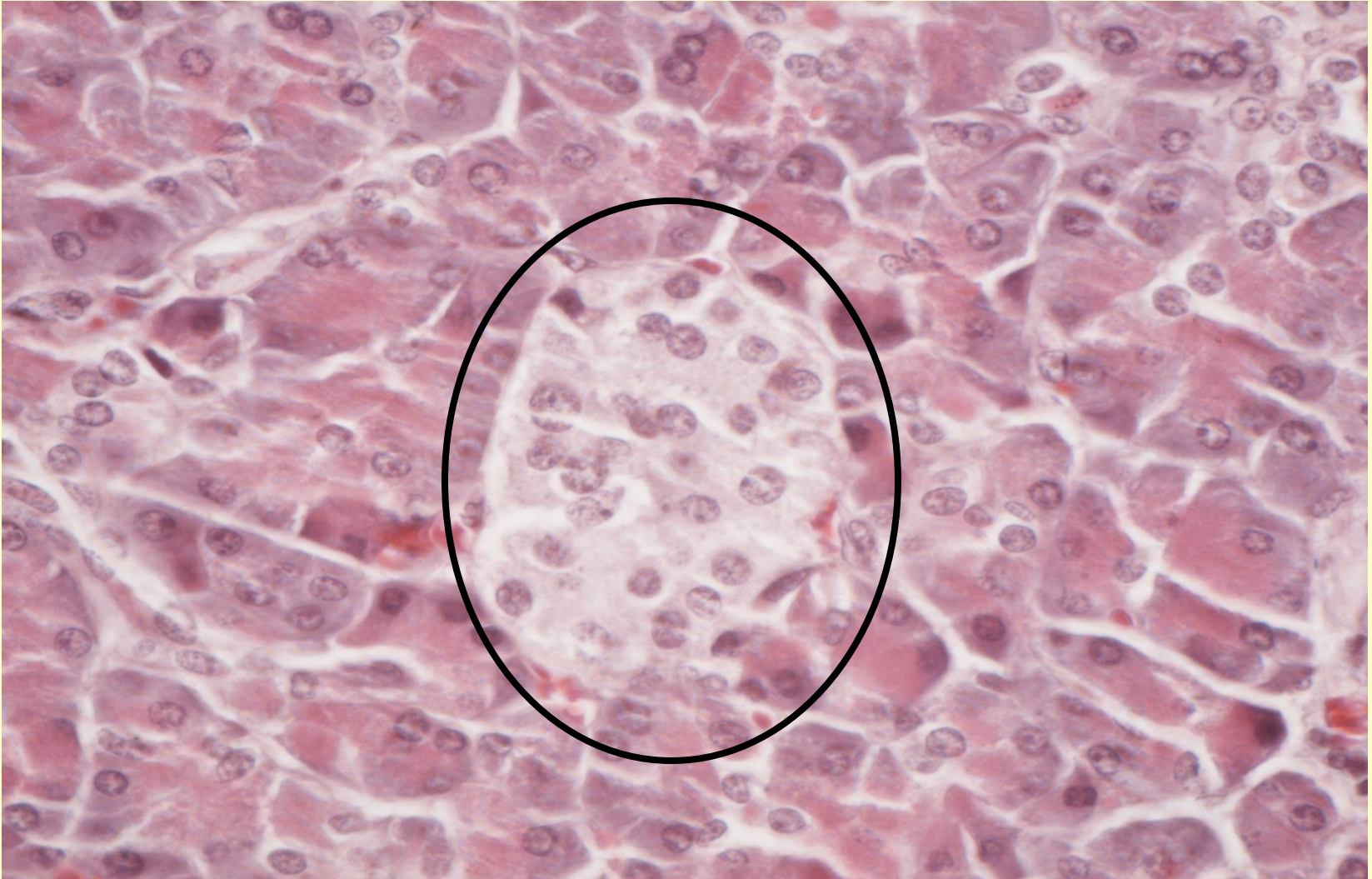
Glanda cordonala, corticosuprarenala, Coloratie
Tricromic GS

Glanda cordonala



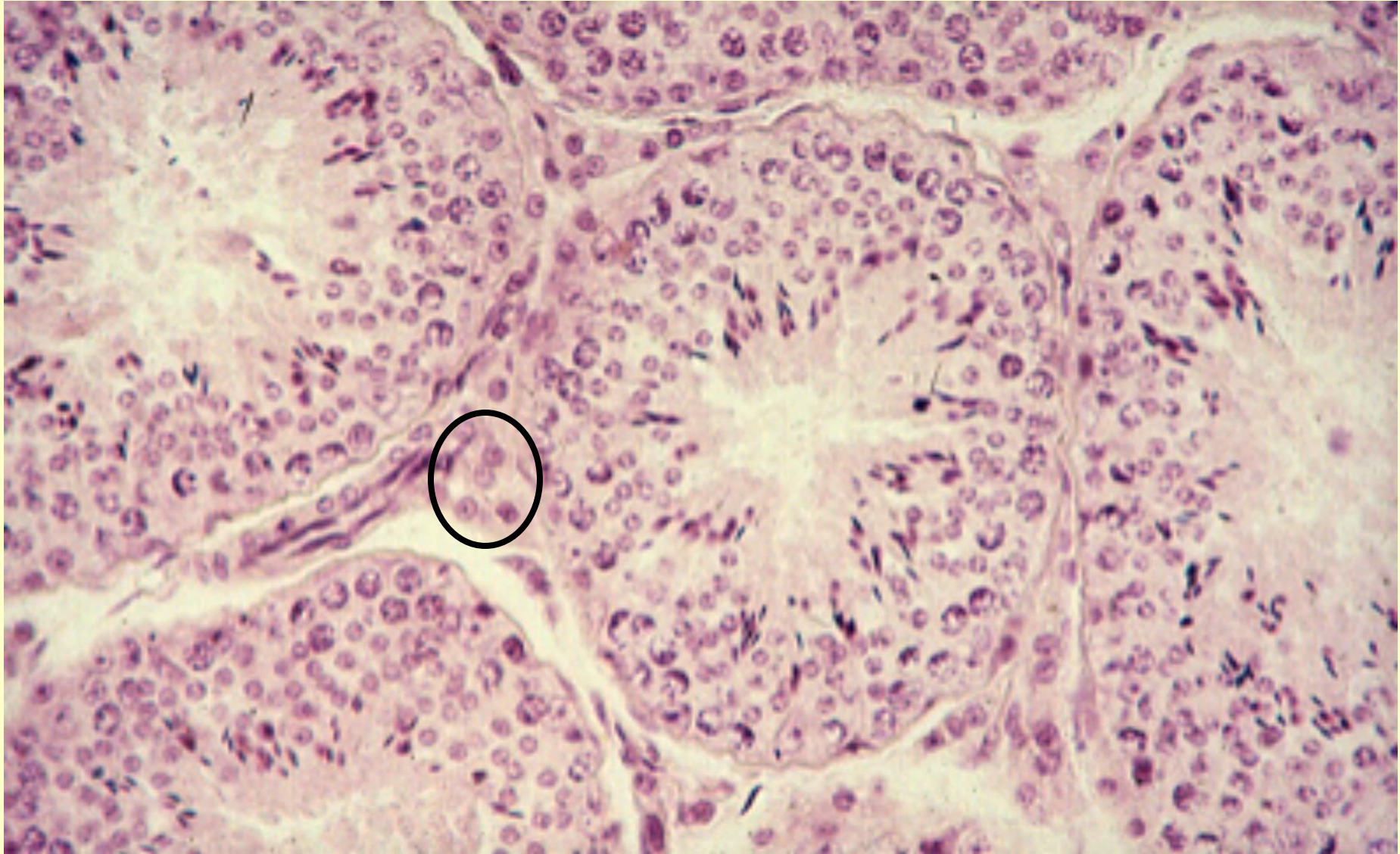
Glanda cordonala, insula Langerhans, Pancreas, Coloratie Tricromic GS

Glanda cordonala



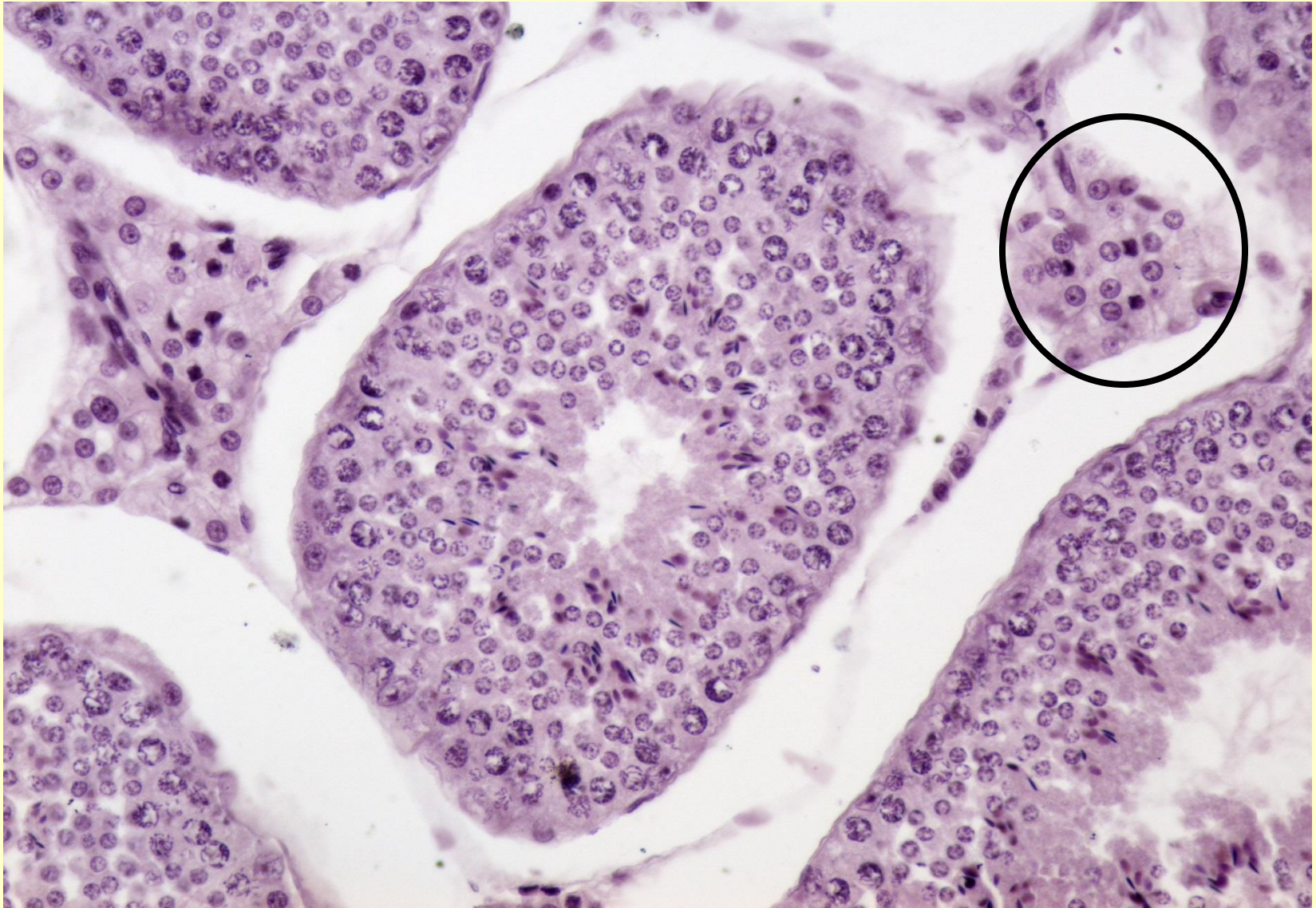
Glanda cordonala, Insula Langerhans, Pancreas, Coloratie Hematoxilina-Eozina

Glande interstitiale



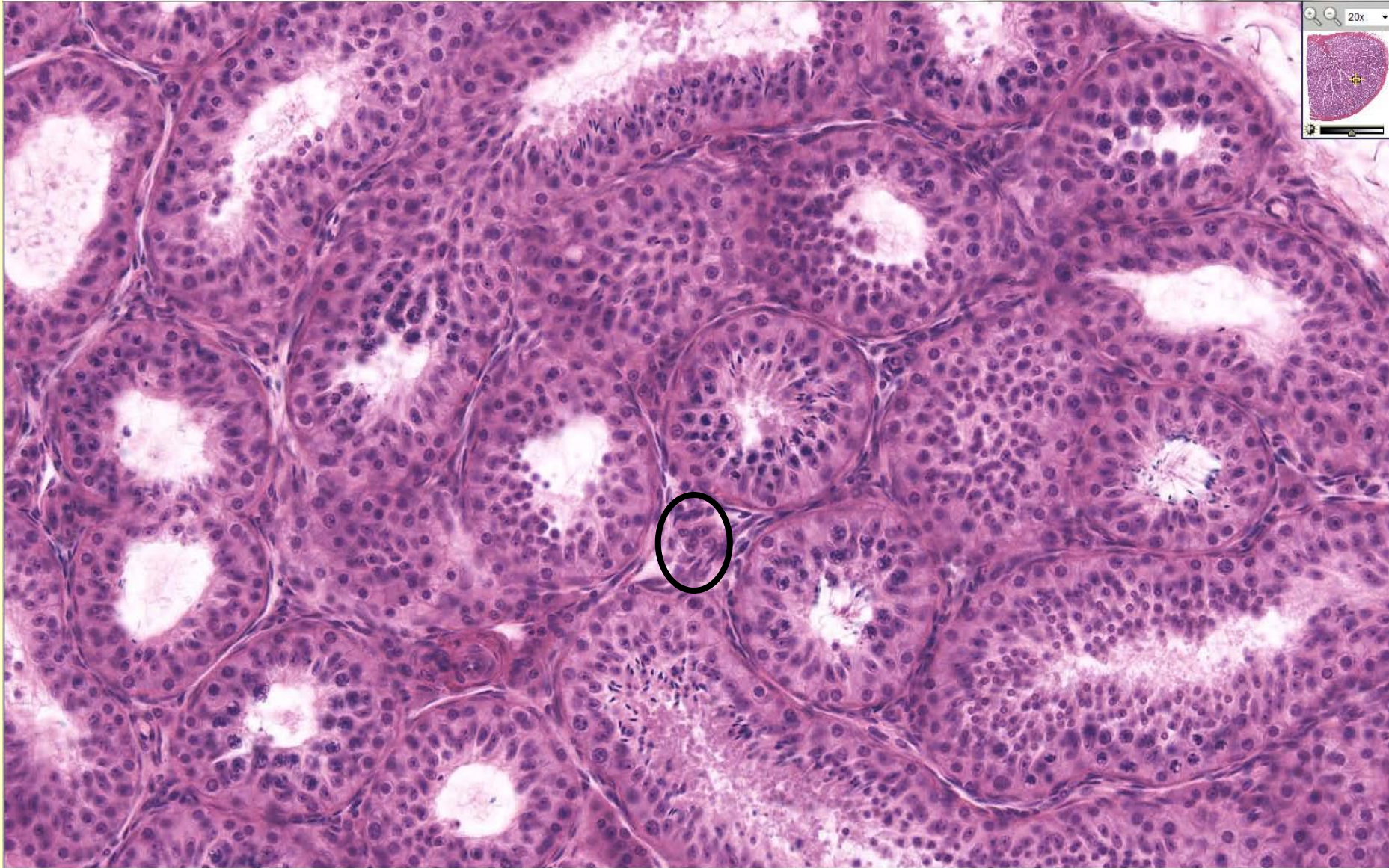
Glanda difuza, glanda interstitiala a testicolului, Coloratie Hematoxilina-Eozina

Glande interstitiale



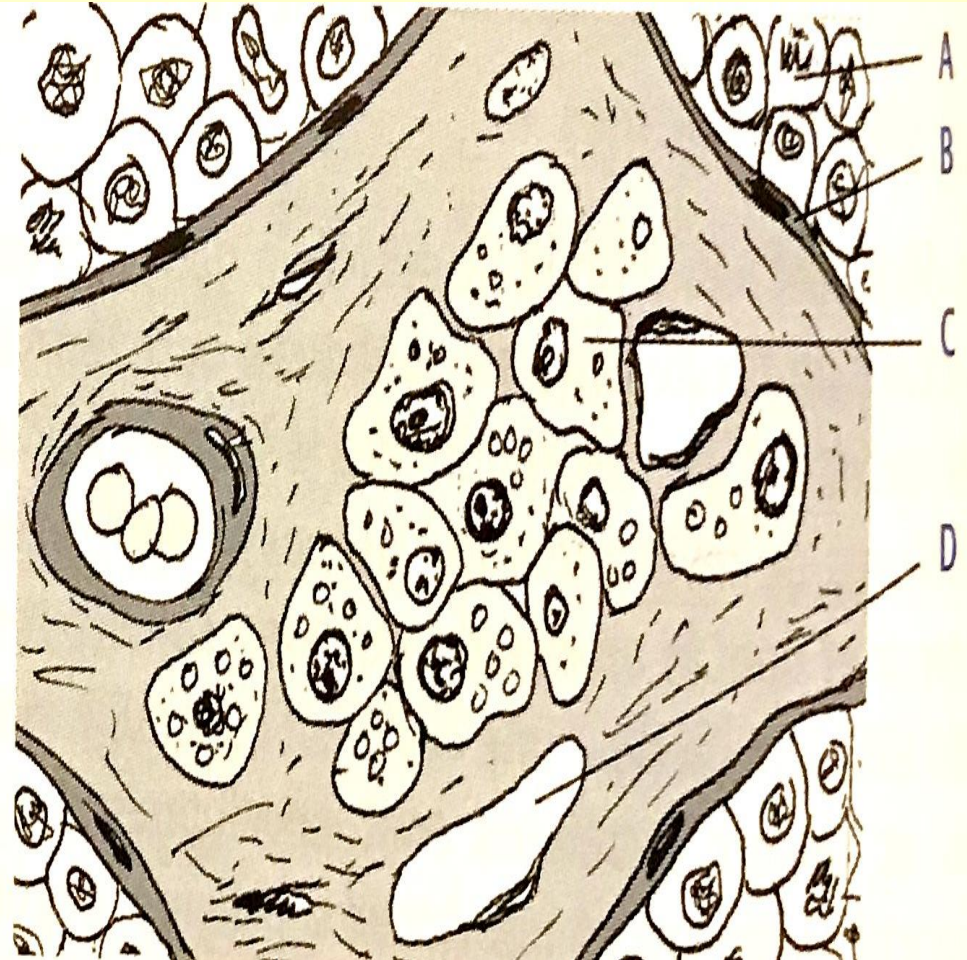
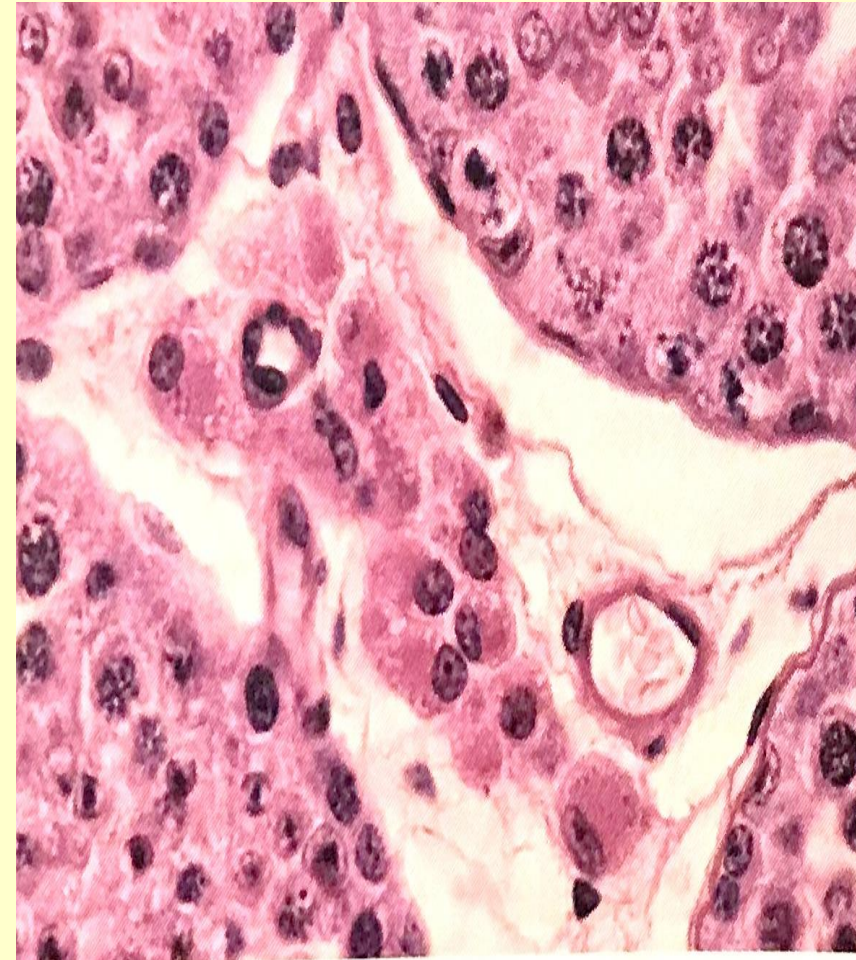
Glanda difuza, glanda interstitiala a testicolului, Coloratie Hematoxilina-Eozina

Glande interstitiale



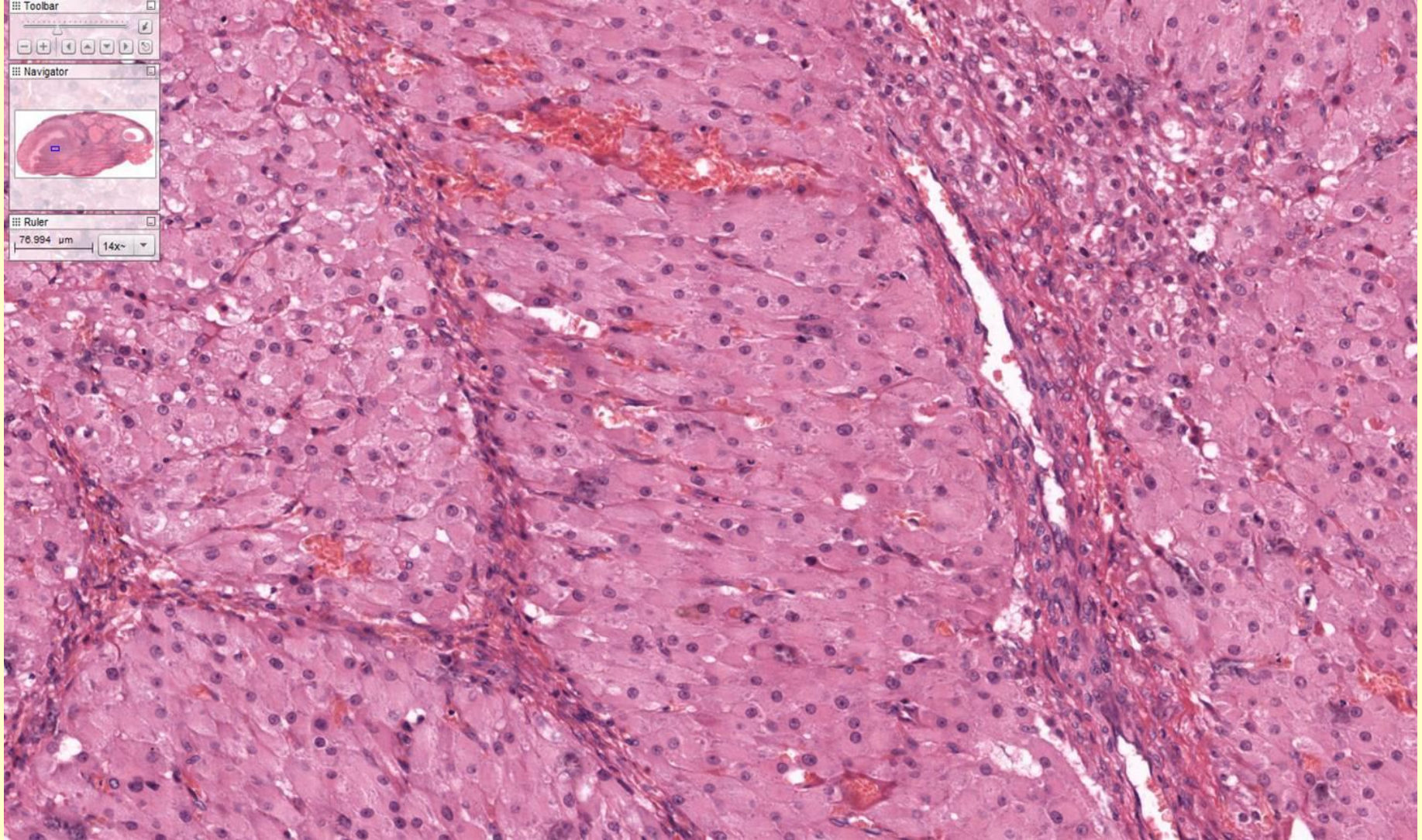
Glanda difuza, glanda interstitiala a testicolului, Coloratie Hematoxilina-Eozina

Glande interstitiale



Glanda difuza, glanda interstitiala a testicolului, Coloratie Hematoxilina-Eozina +schita.
A. Celule germinale din tubul seminifer, B. celule peritubulare, C. Celule Leydig, D. capilar de sange.

Glande interstitiale

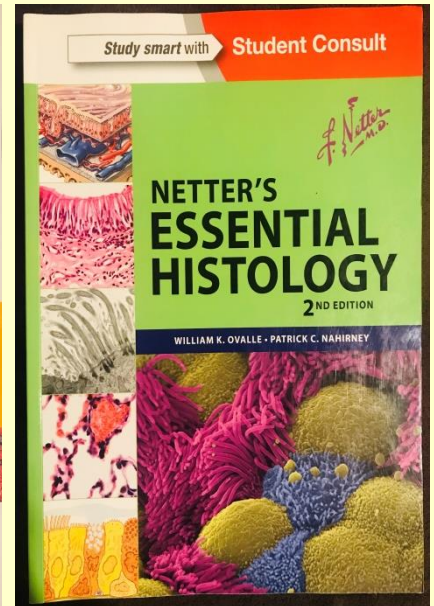
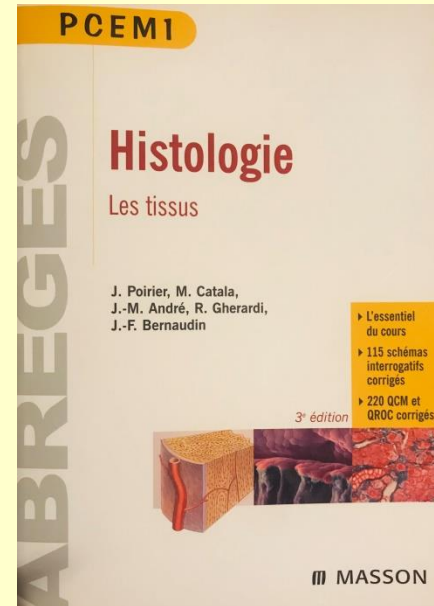
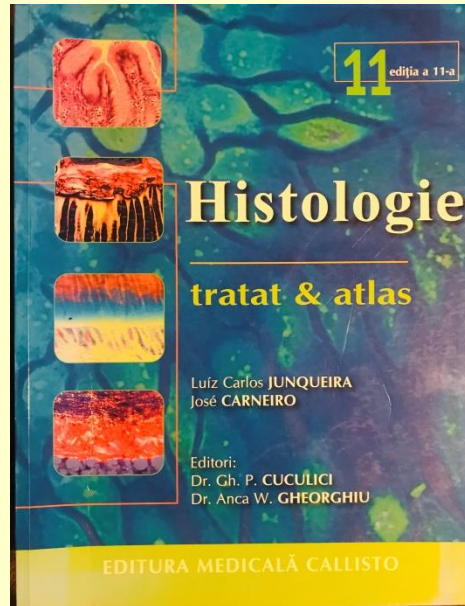
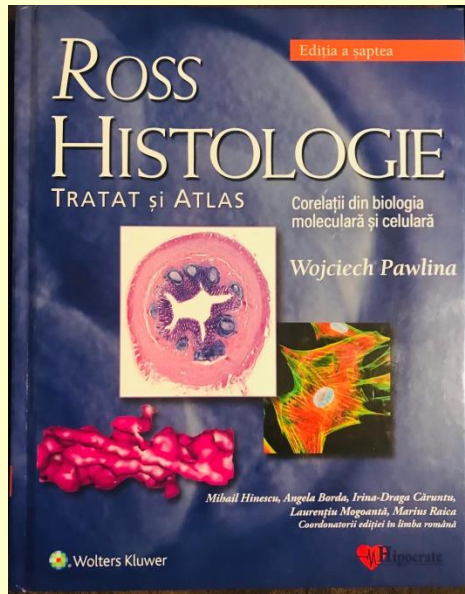


Glanda interstitiala a ovarului, corp galben, Coloratie Hematoxilina-Eozina

Preparate de desenat

- Glanda alveolara plina. Glanda sebacee. Piele. Col HE;
- Acini serosi, acini mucosi, acini micsti. Glanda salivara mare. Col HE;
- Glanda tubulara dreapta. Glanda Lieberkuhn. Col HE.

Bibliografie



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