

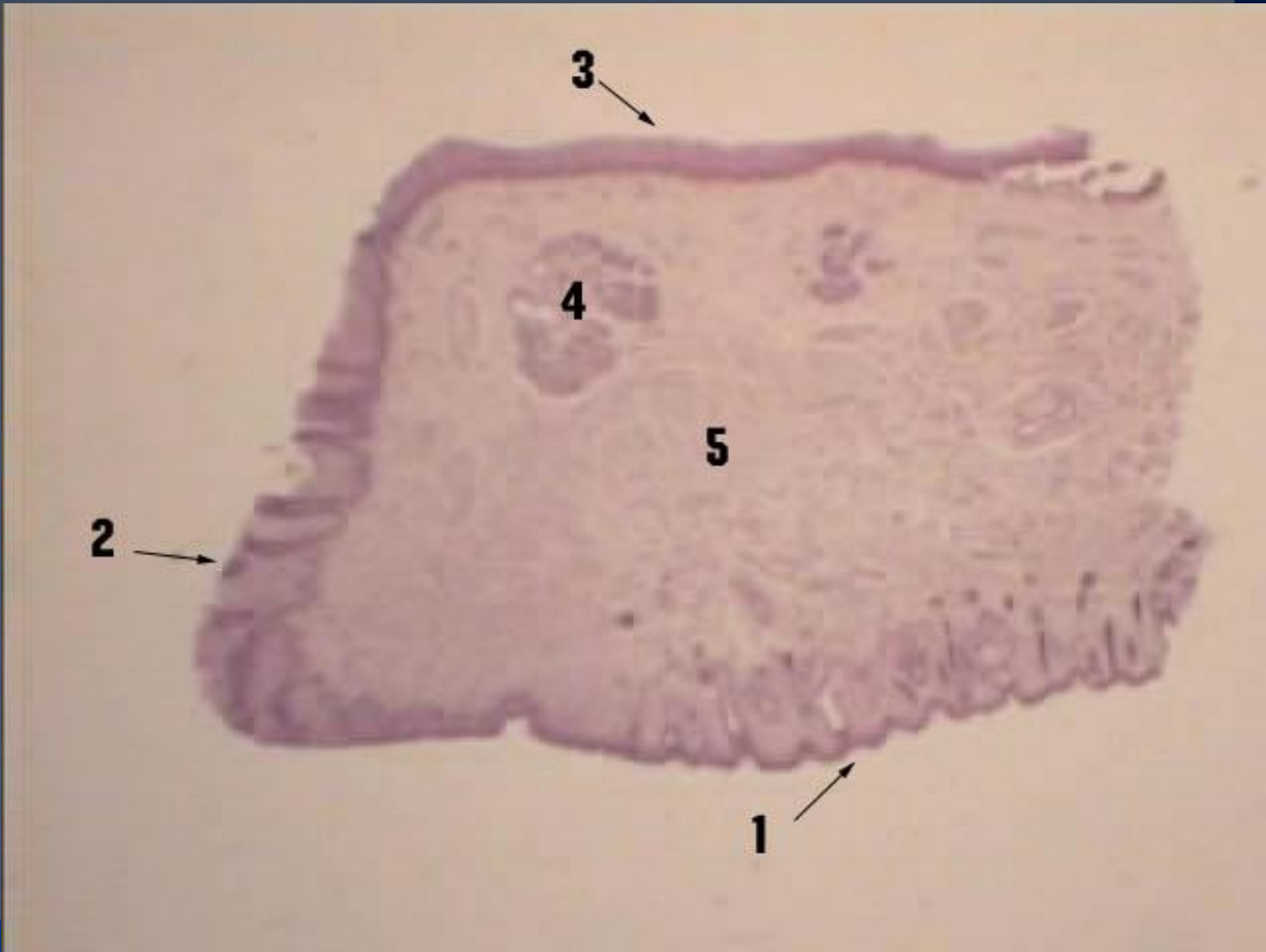
Oral cavity

A mucocutaneous junction (lip) ■

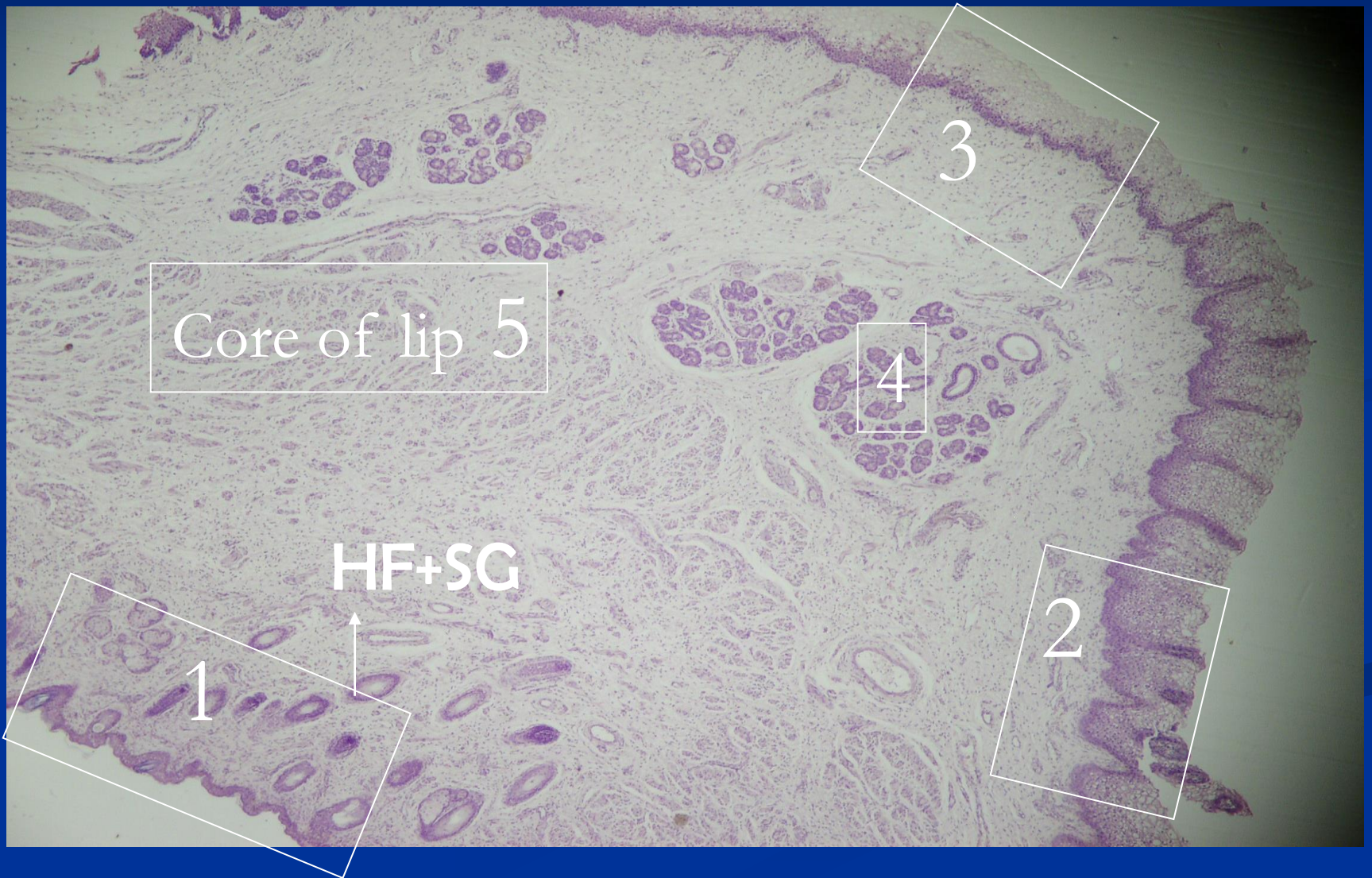
Tongue ■

Salivary glands ■

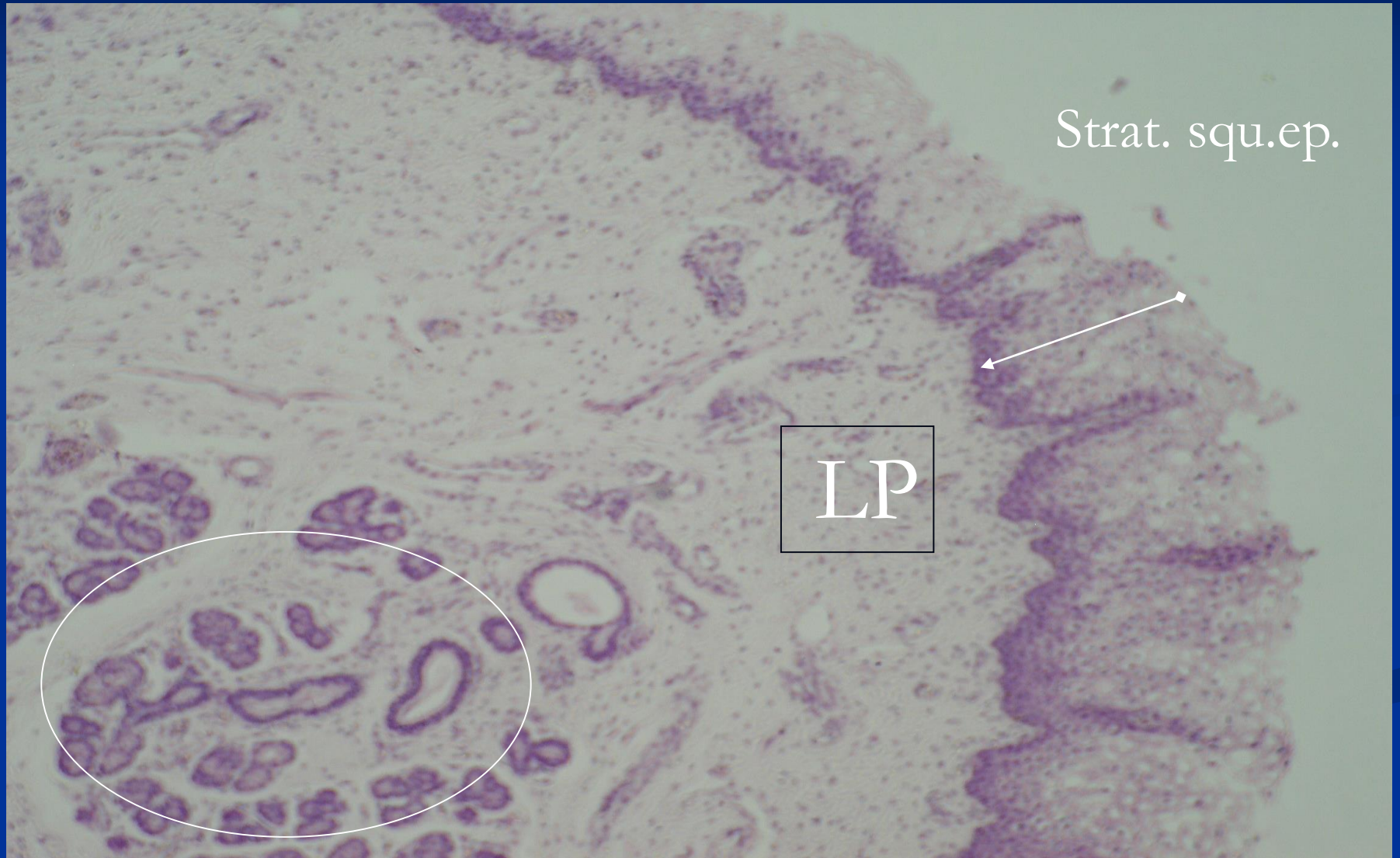
Sagittal section of LIP



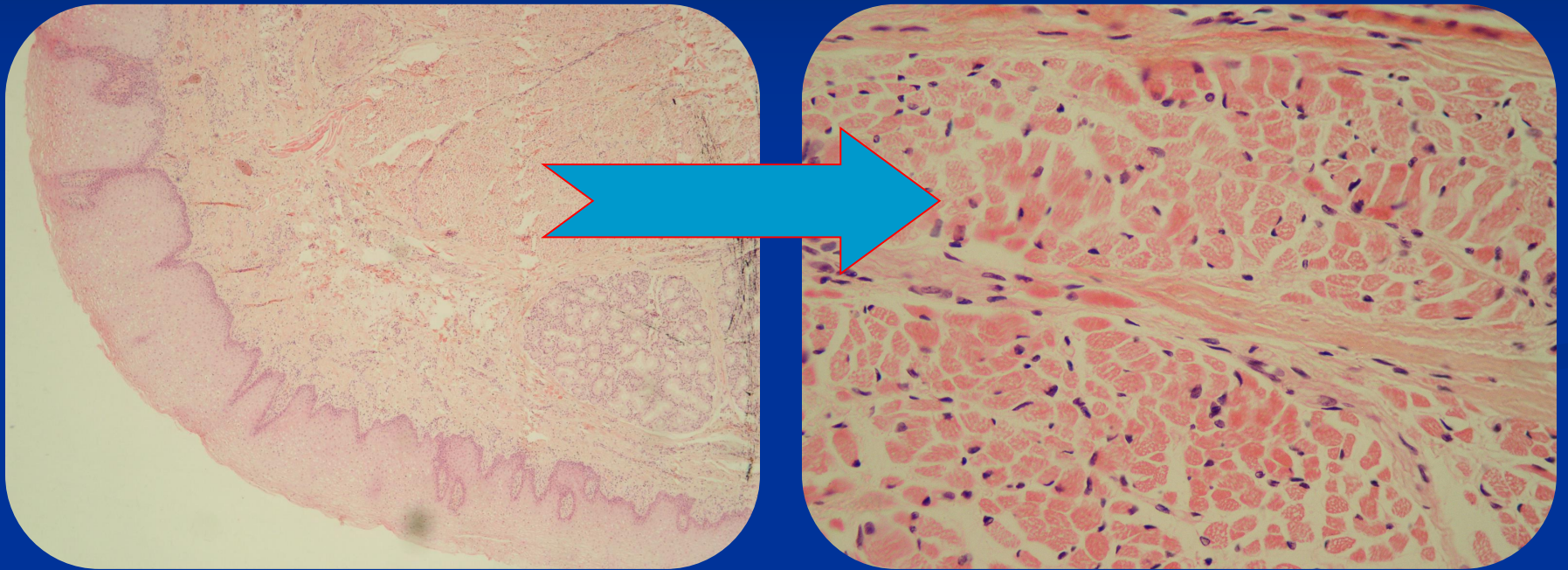
1 Oral mucosa 2 red margin



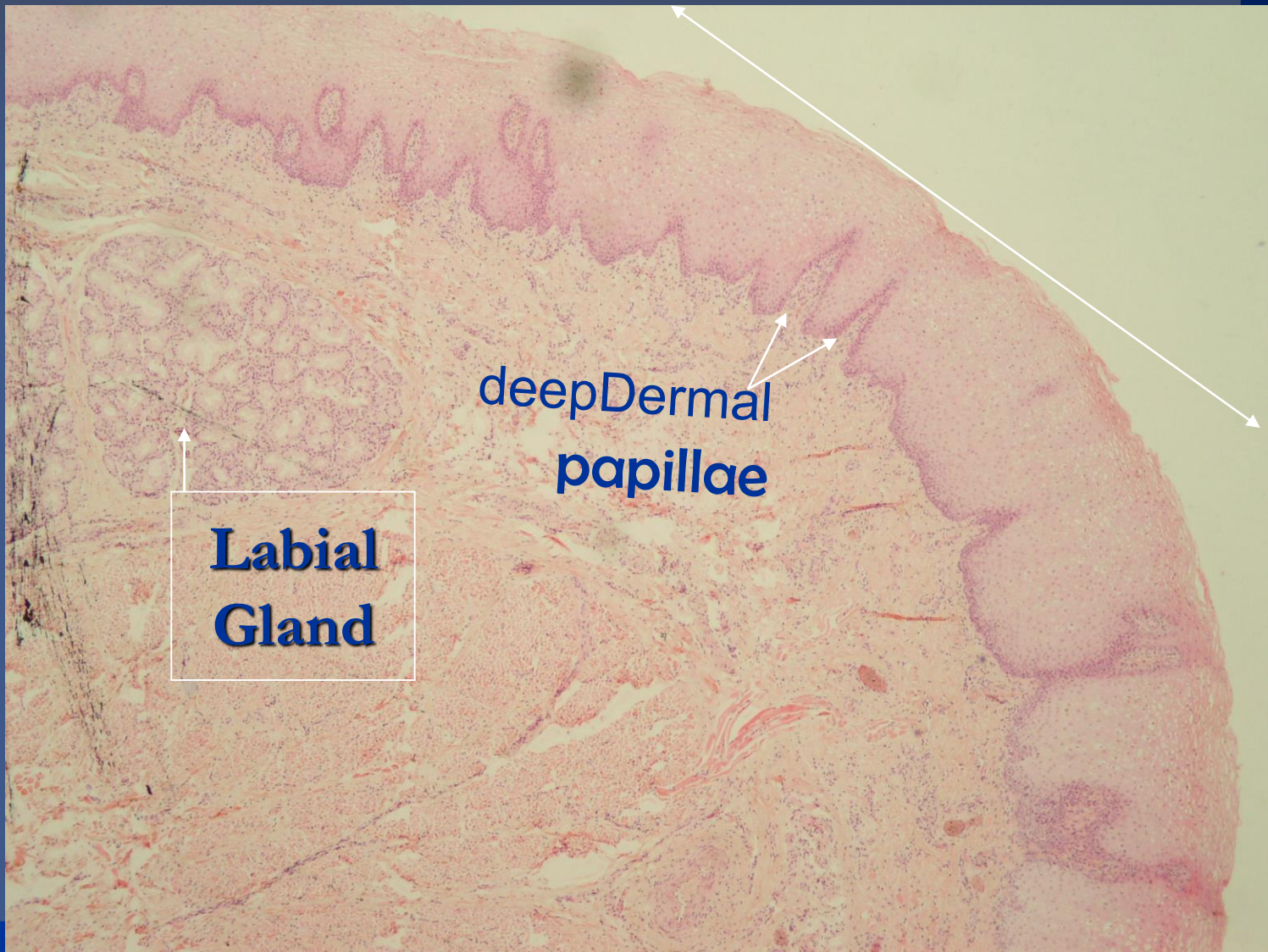
Oral mucosa part labial seromucous (minor gland)



Fine skeletal muscle in core of lip

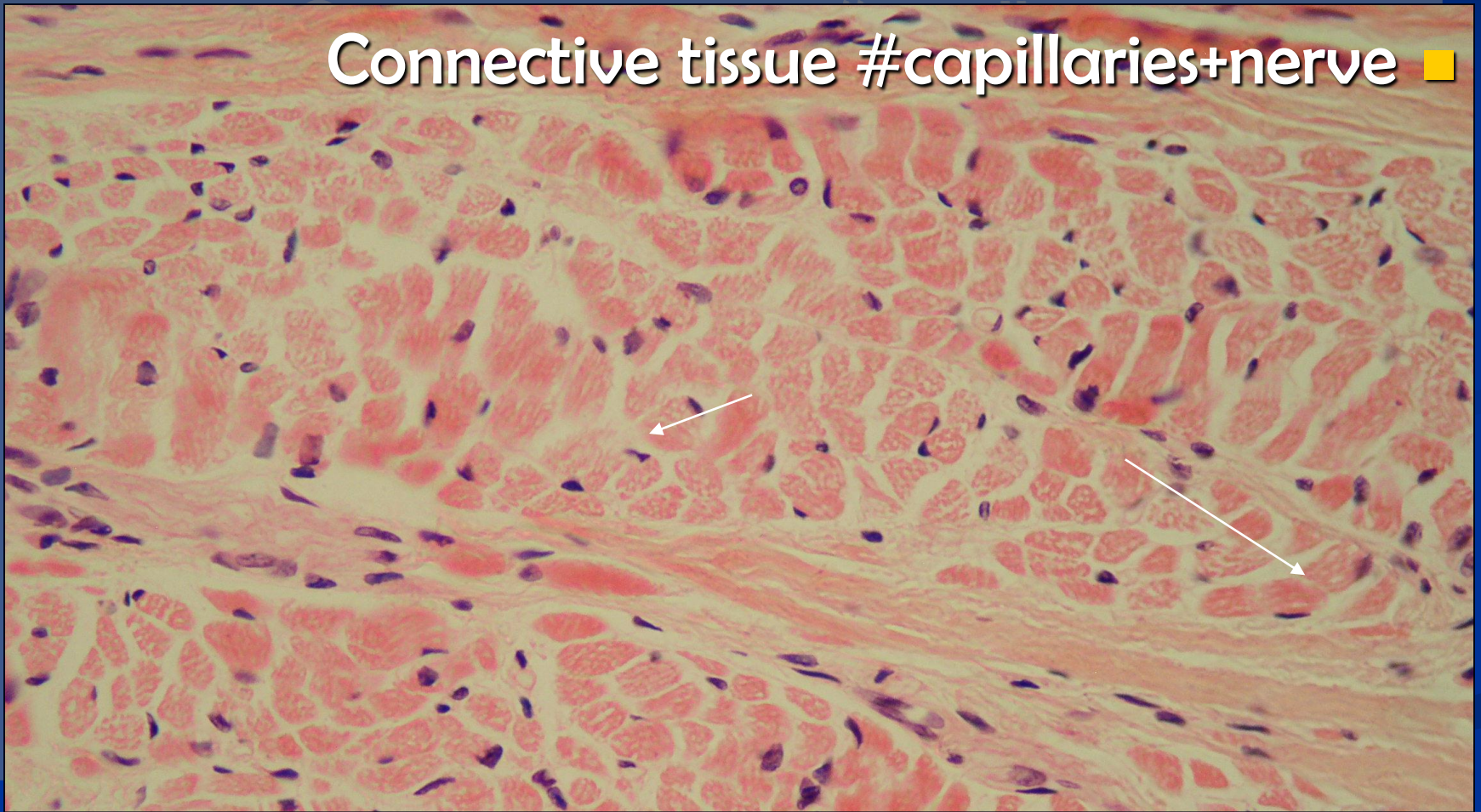


Vermilion (transition zone)



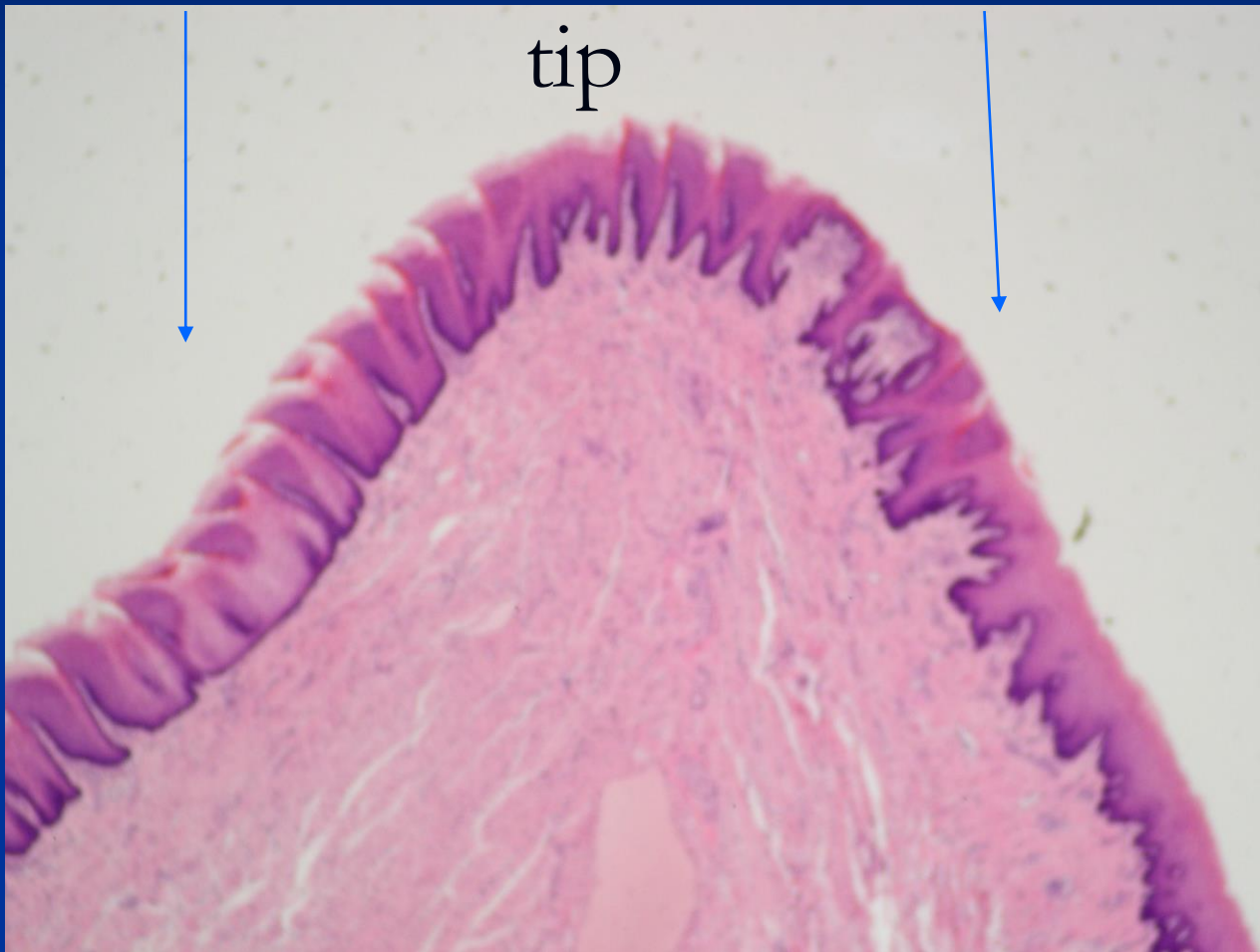
Fine skeletal muscle in core of lip

Connective tissue #capillaries+nerve ■

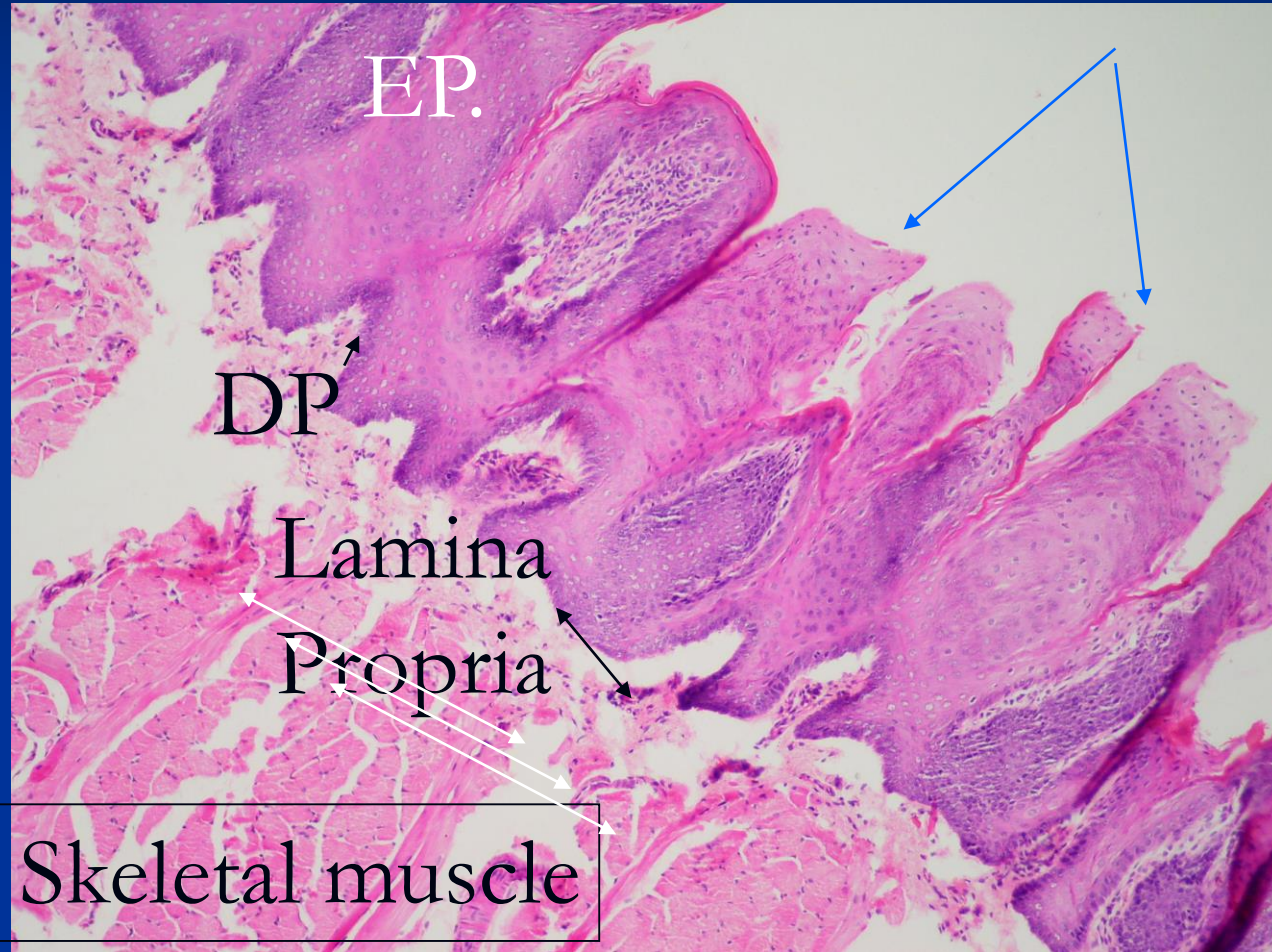


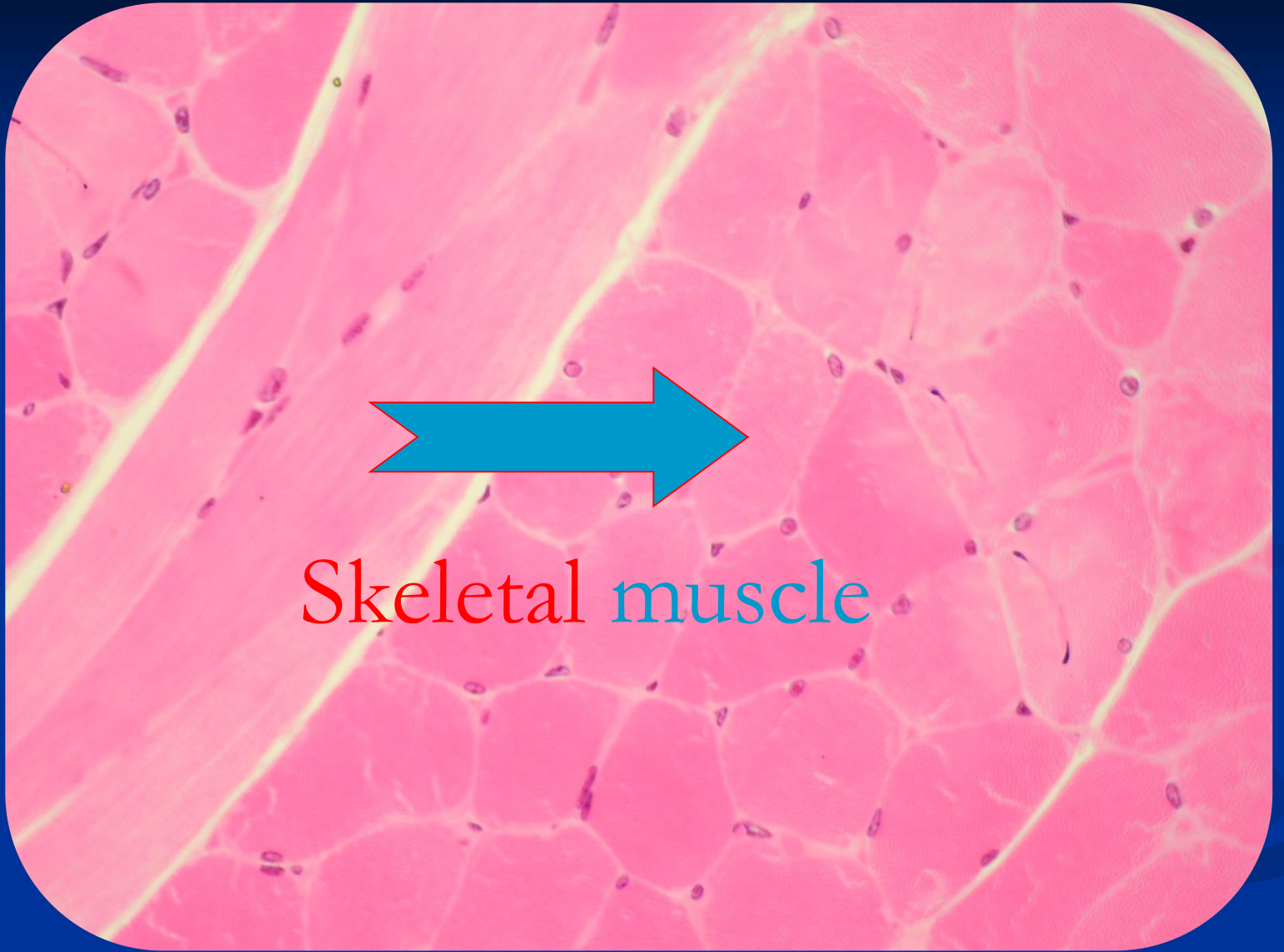
Tongue :

dorsal surface Ventral surface



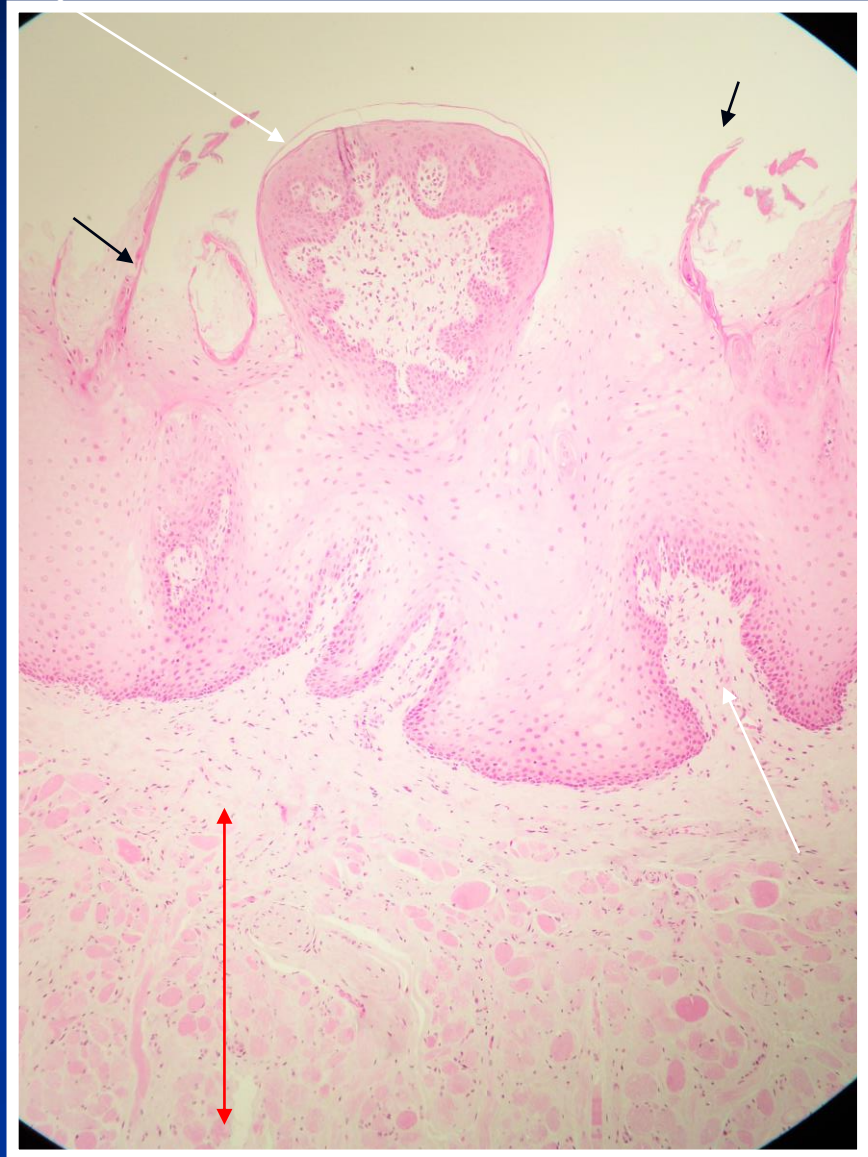
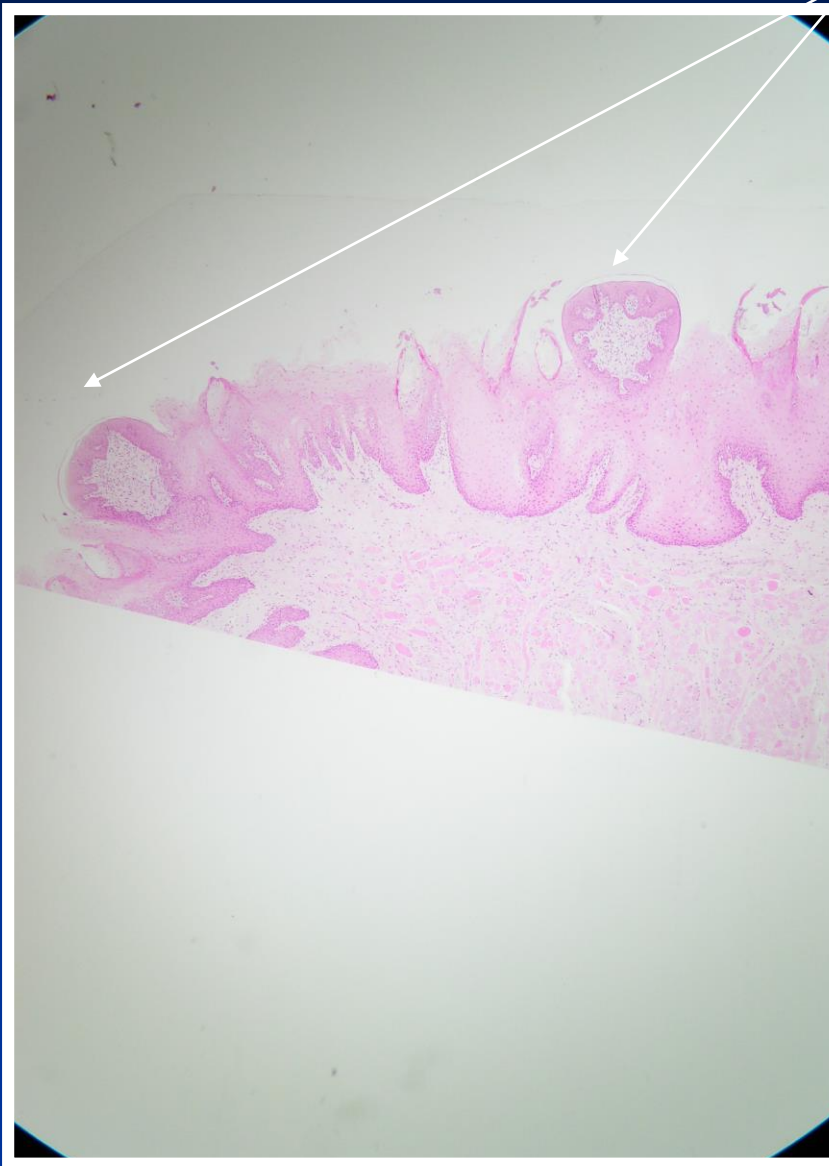
Filiform Papillae





Skeletal muscle

Fungiform papilla



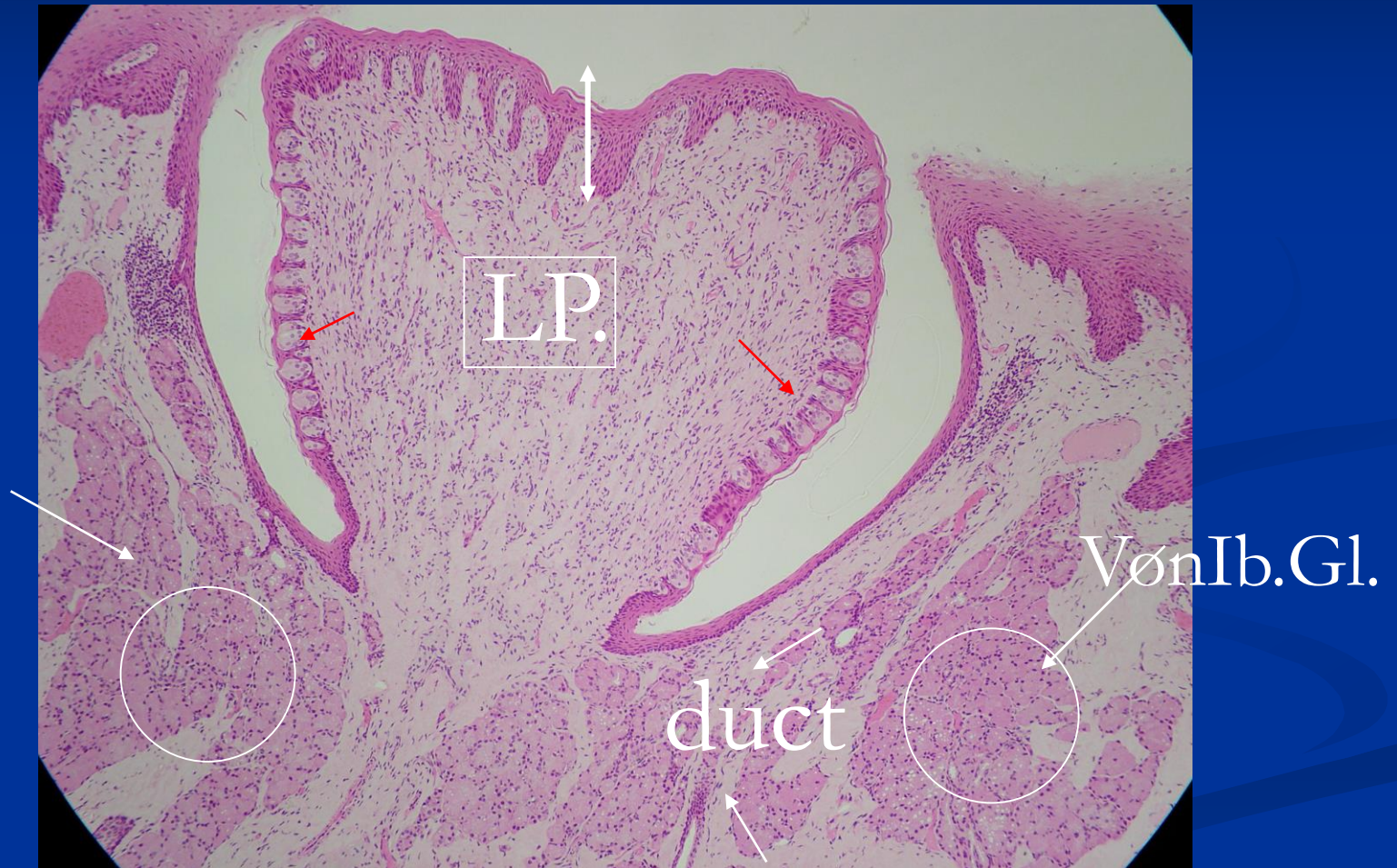
Str. Squa.Ep..



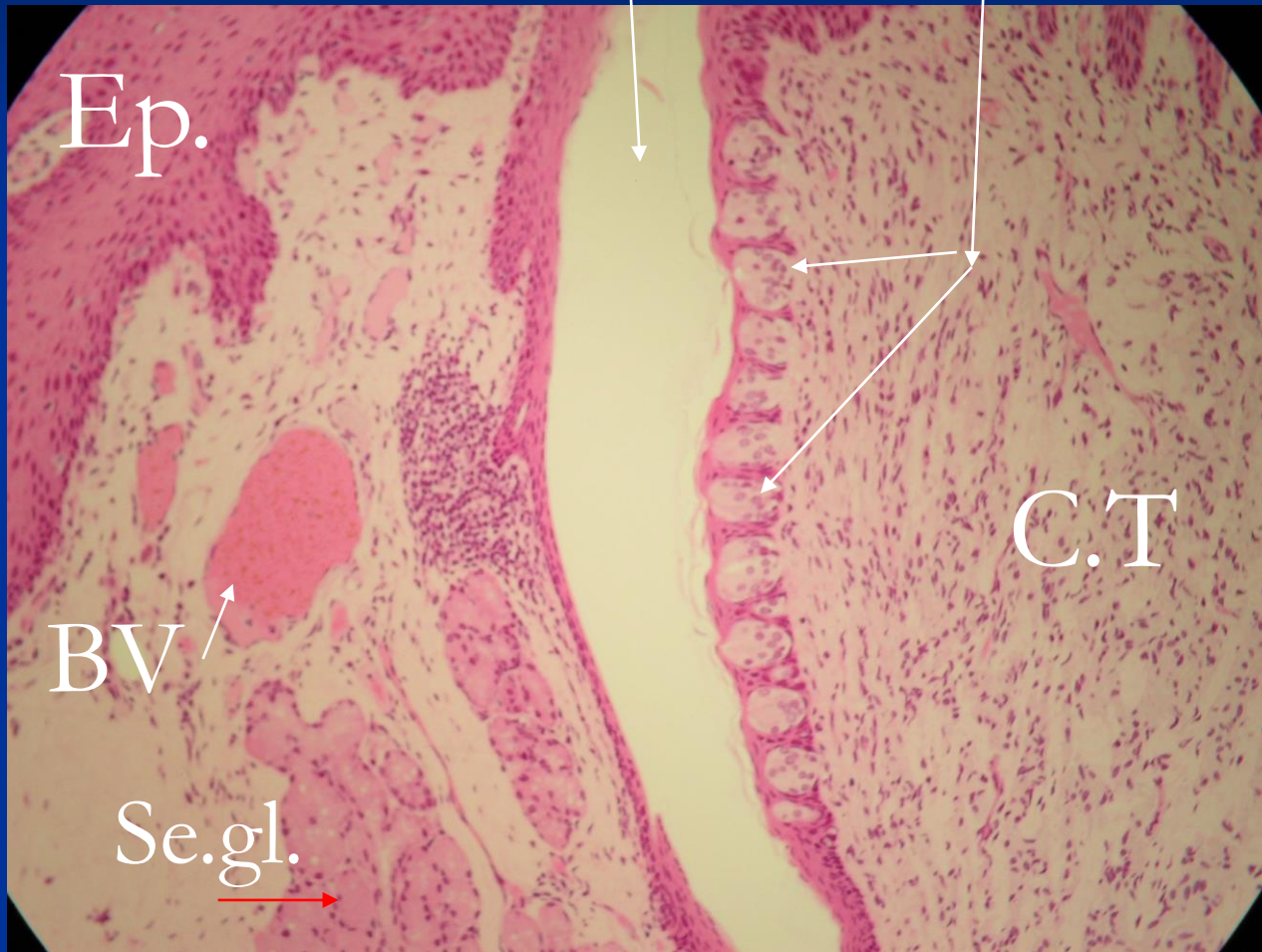
Circumvallate Papilla: sulcus=groove VonIbner's gland



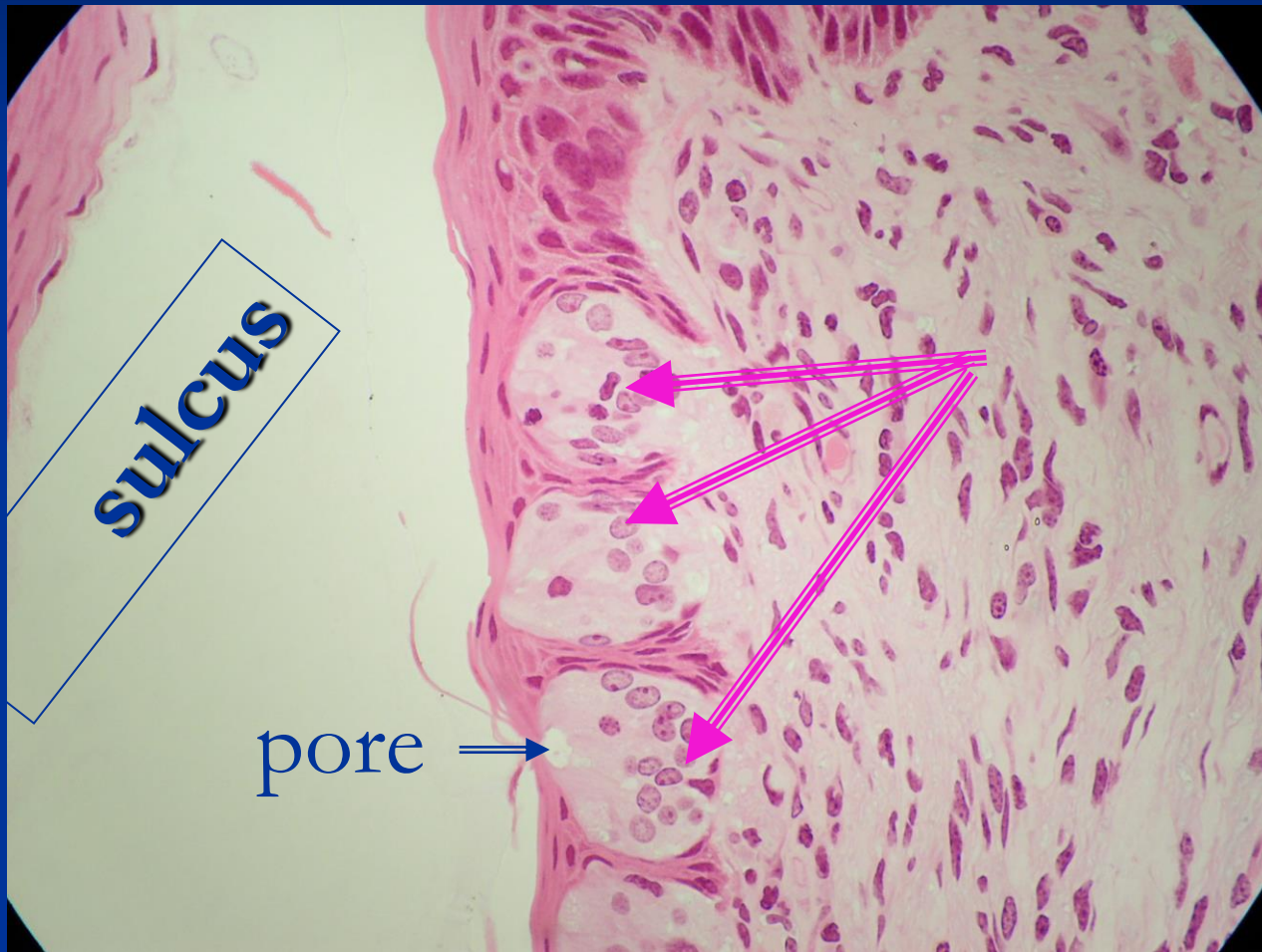
Taste bud



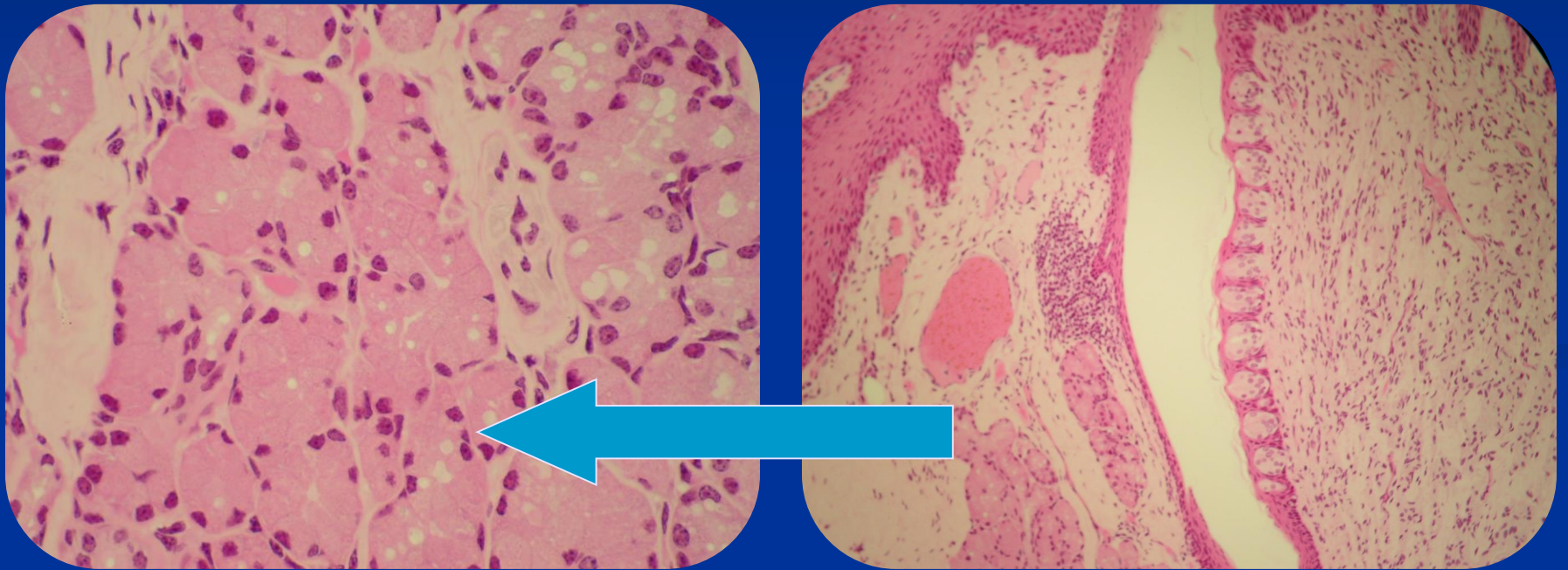
Serous gl. sulcus Taste bud



Taste bud



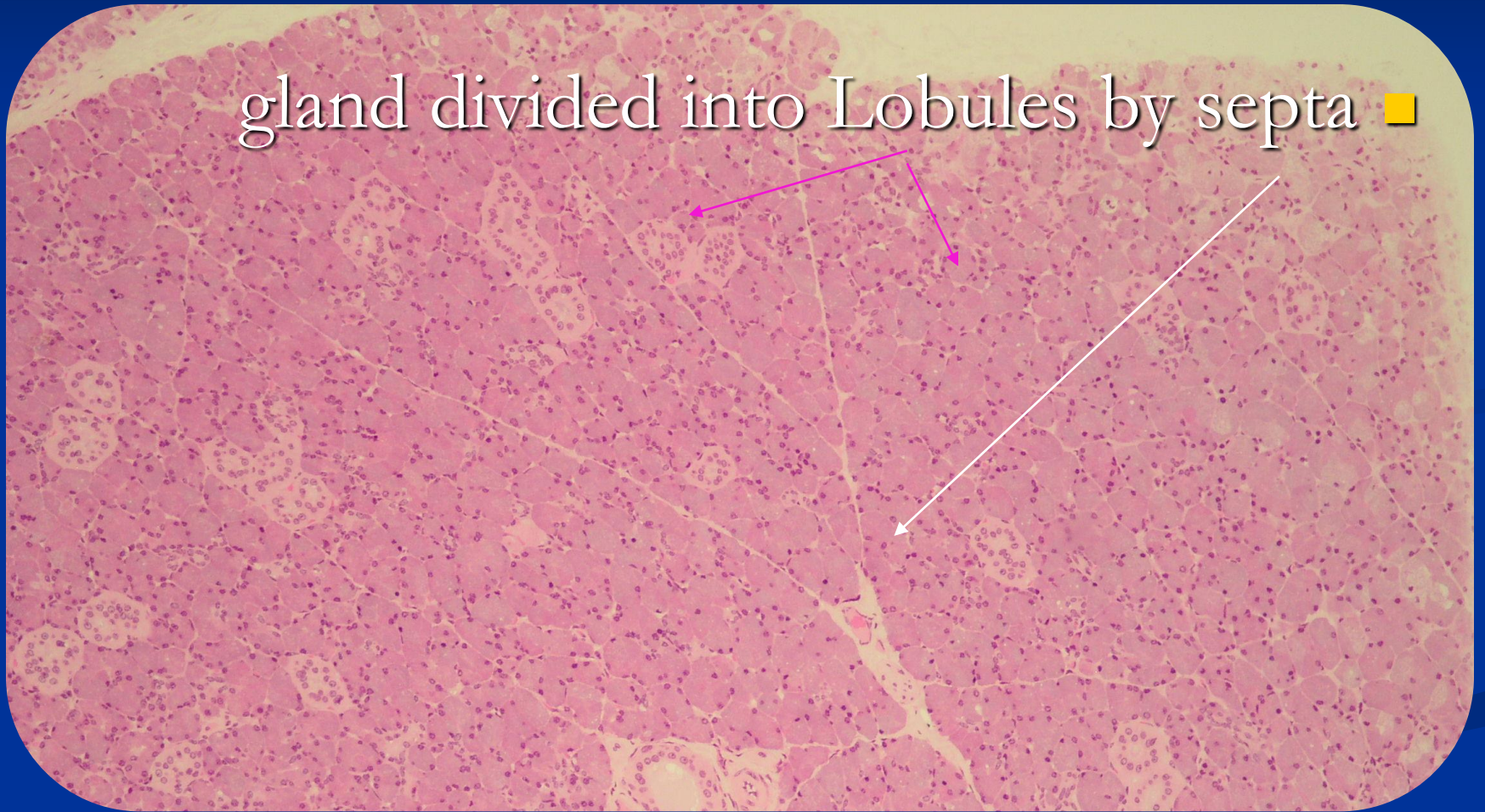
VonIbner's gland=minor gland



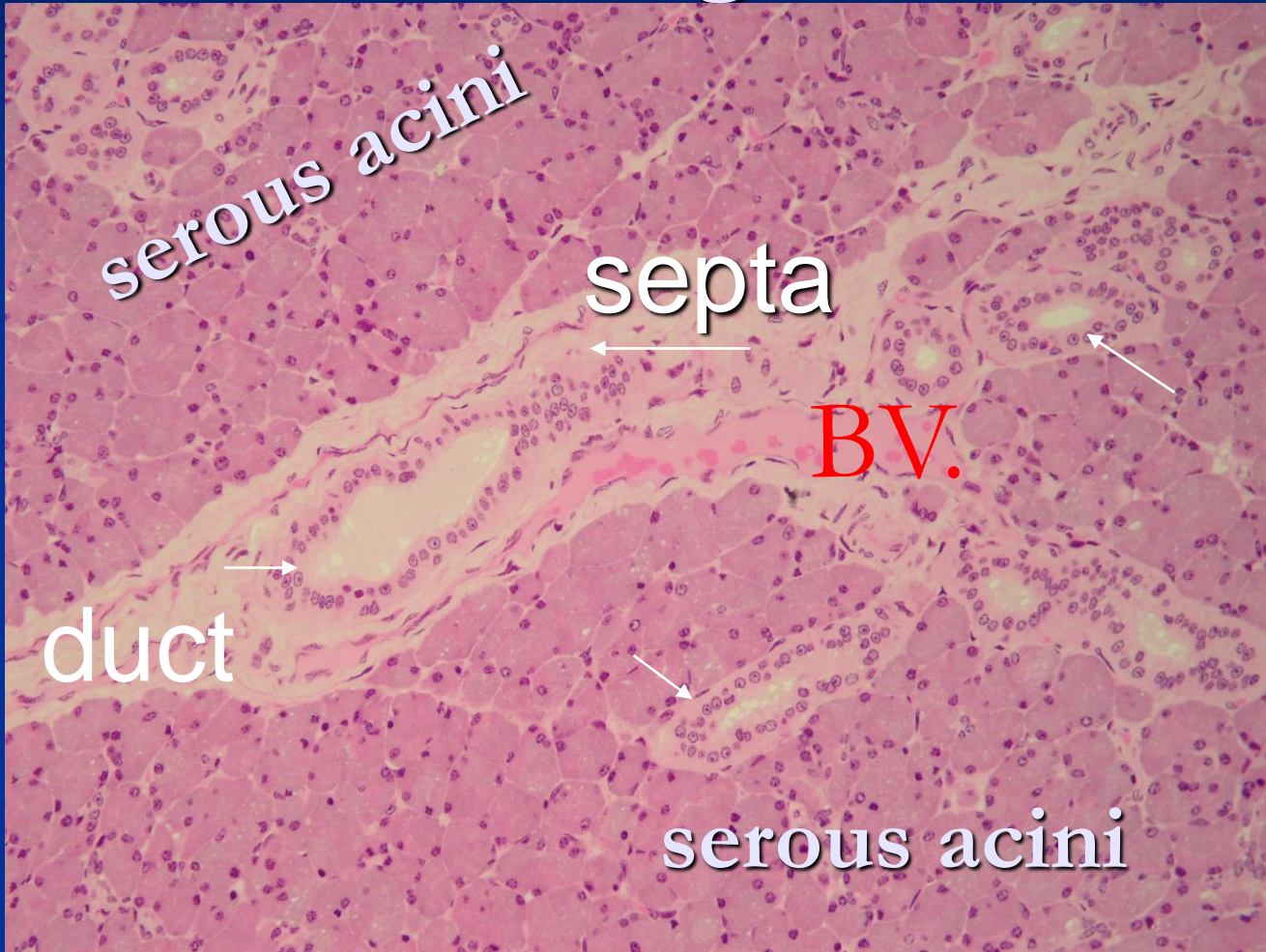
Salivary glands:=major gland
compound tubuloacinar gland
parenchyma&stroma

Parotid gland:

gland divided into Lobules by septa ■



Parotid gland: serous gland



serous acini

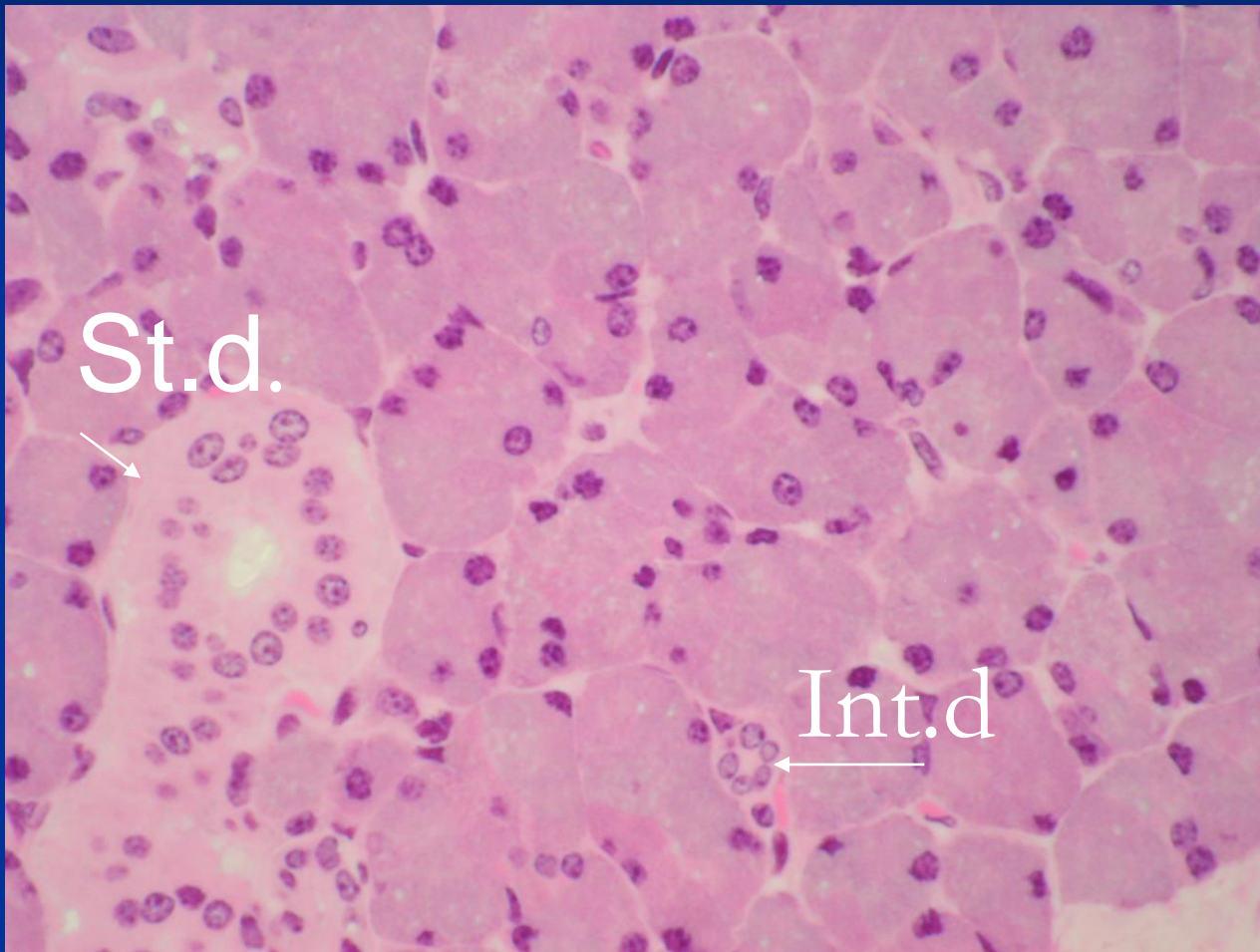
septa

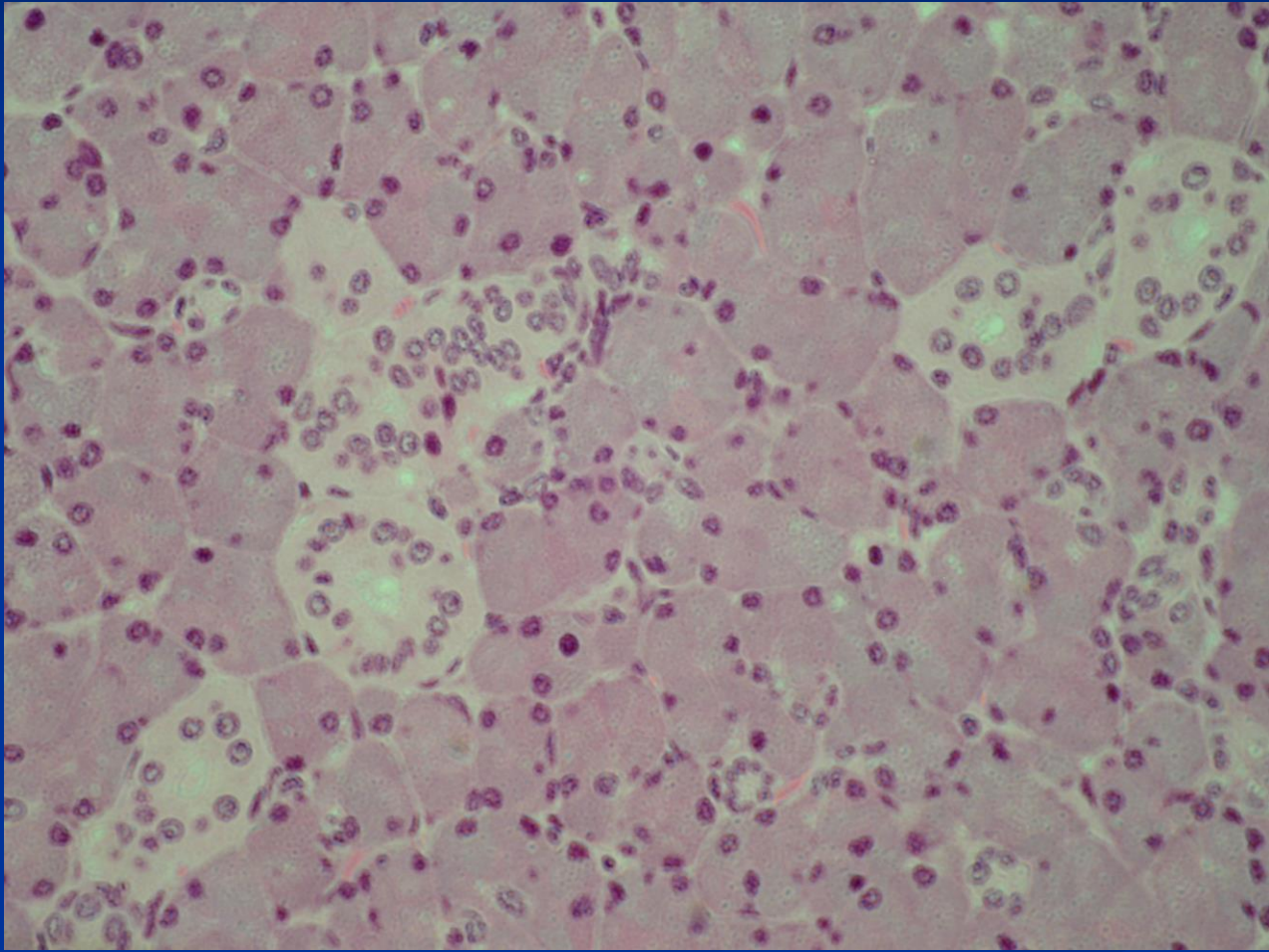
BV.

duct

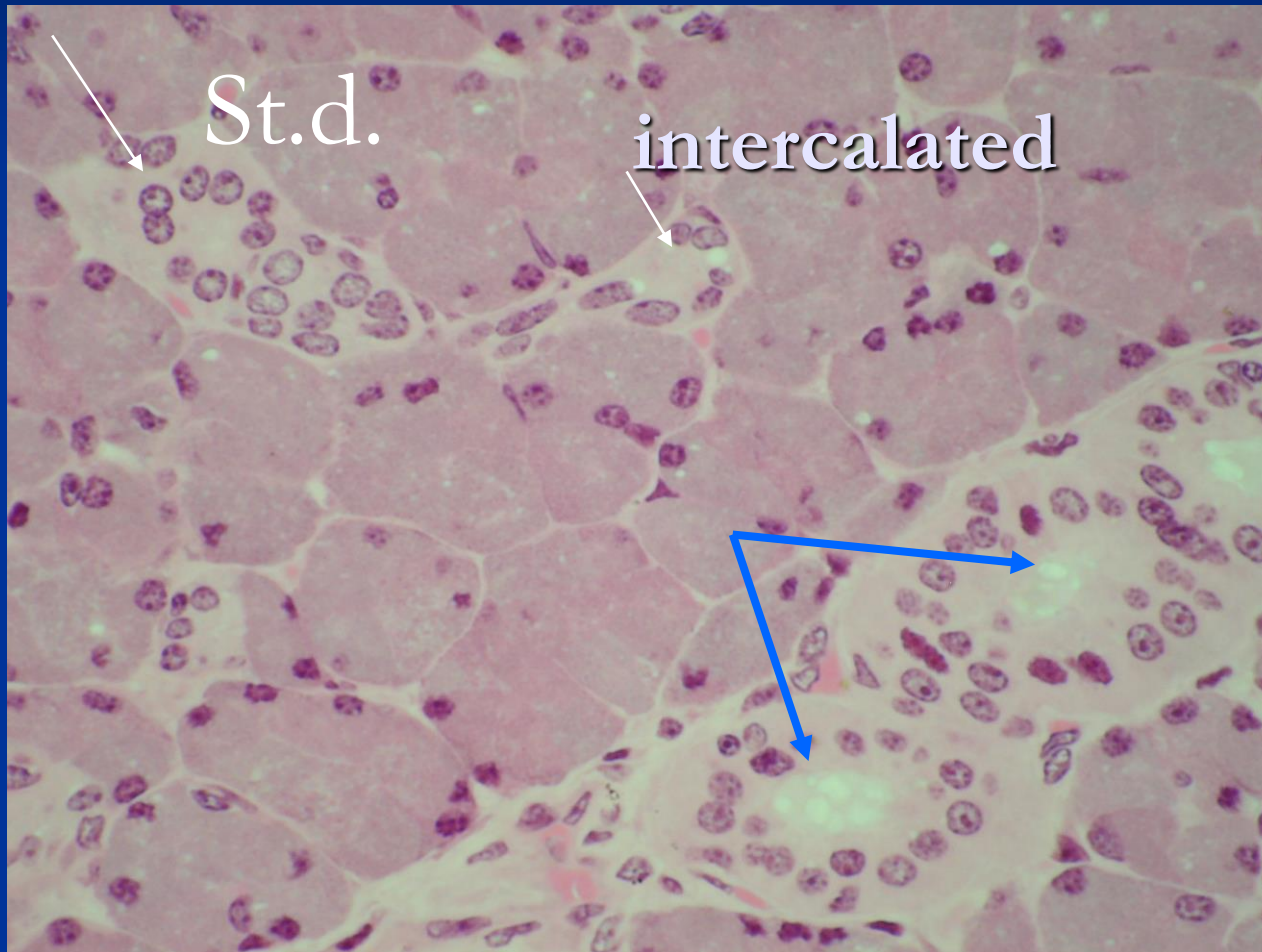
serous acini

Striated & intercalated (Intralobular duct)





Interlobular duct





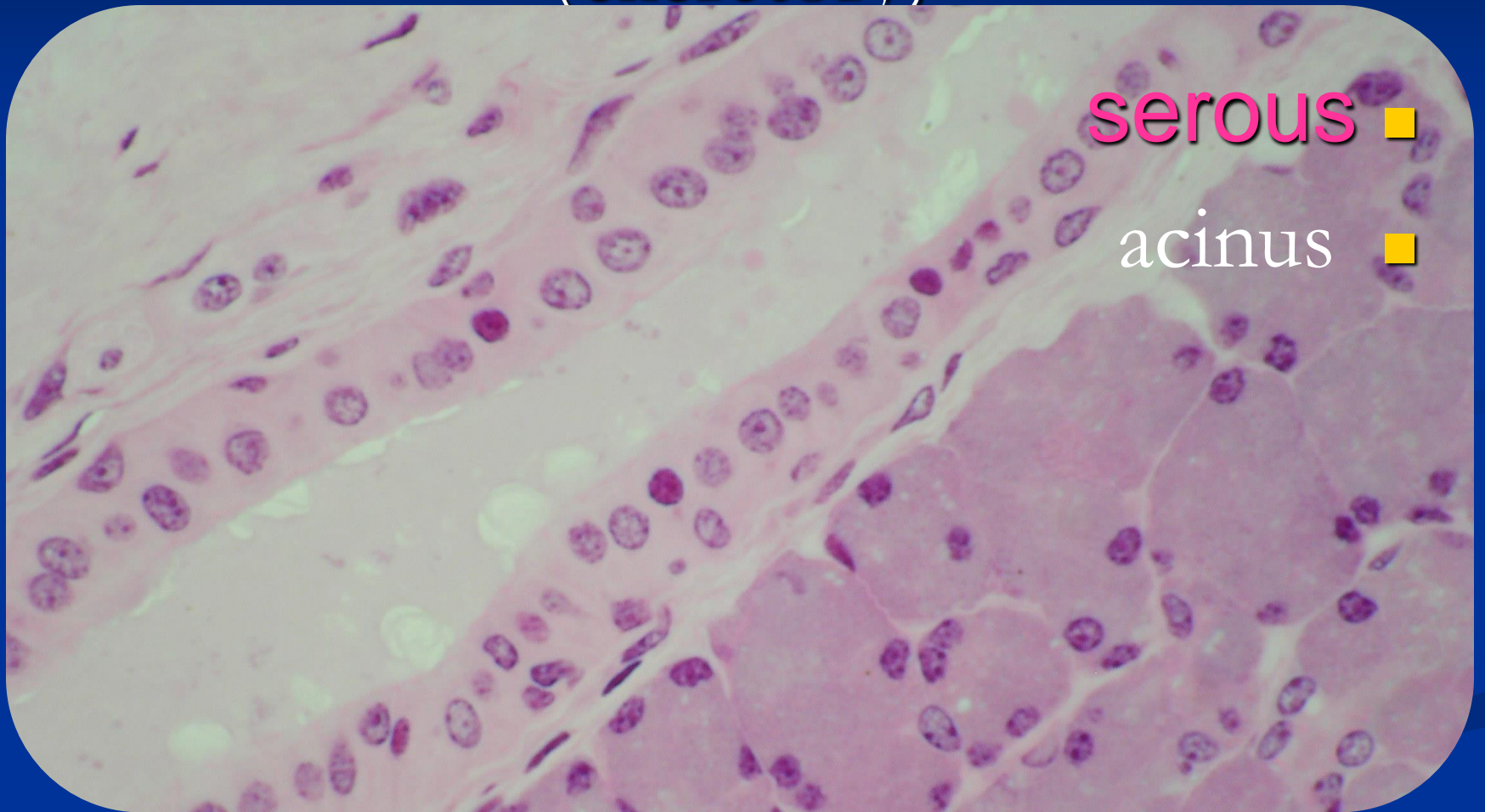
Serous
acinus

This histological micrograph shows a section of a salivary gland. The image is dominated by serous acini, which are clusters of cells with a characteristic basophilic (dark purple) staining of their nuclei and a lighter, eosinophilic (pink) cytoplasm. The acini are arranged in lobes separated by interlobular connective tissue. A prominent interlobular duct is visible, lined by a simple cuboidal epithelium. The duct lumen is clear, and the surrounding connective tissue contains small blood vessels and occasional inflammatory cells. The overall architecture is typical of a serous gland.

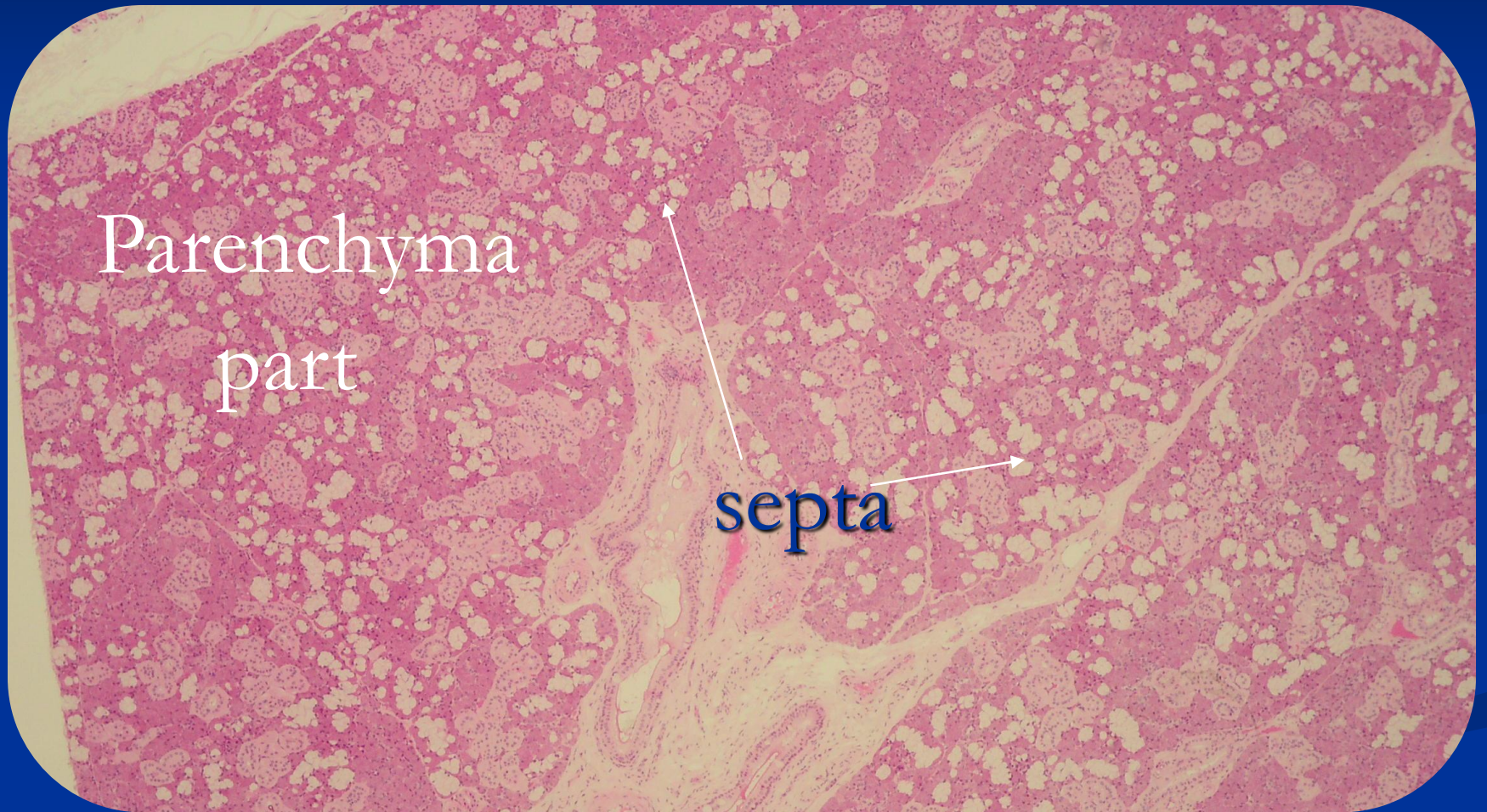
Interlobular
duct

S.

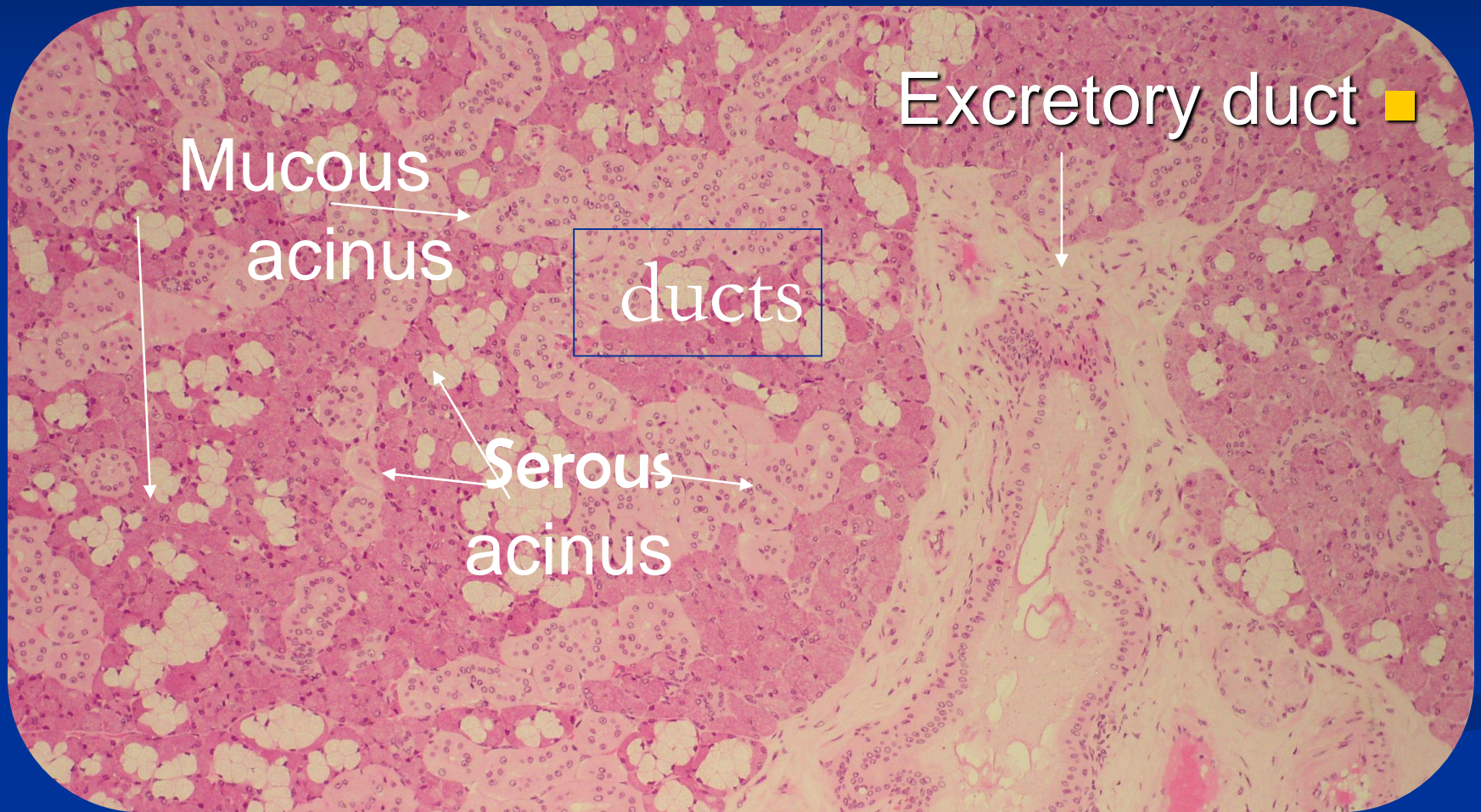
Interlobular duct (excretory)



Submandibular gland

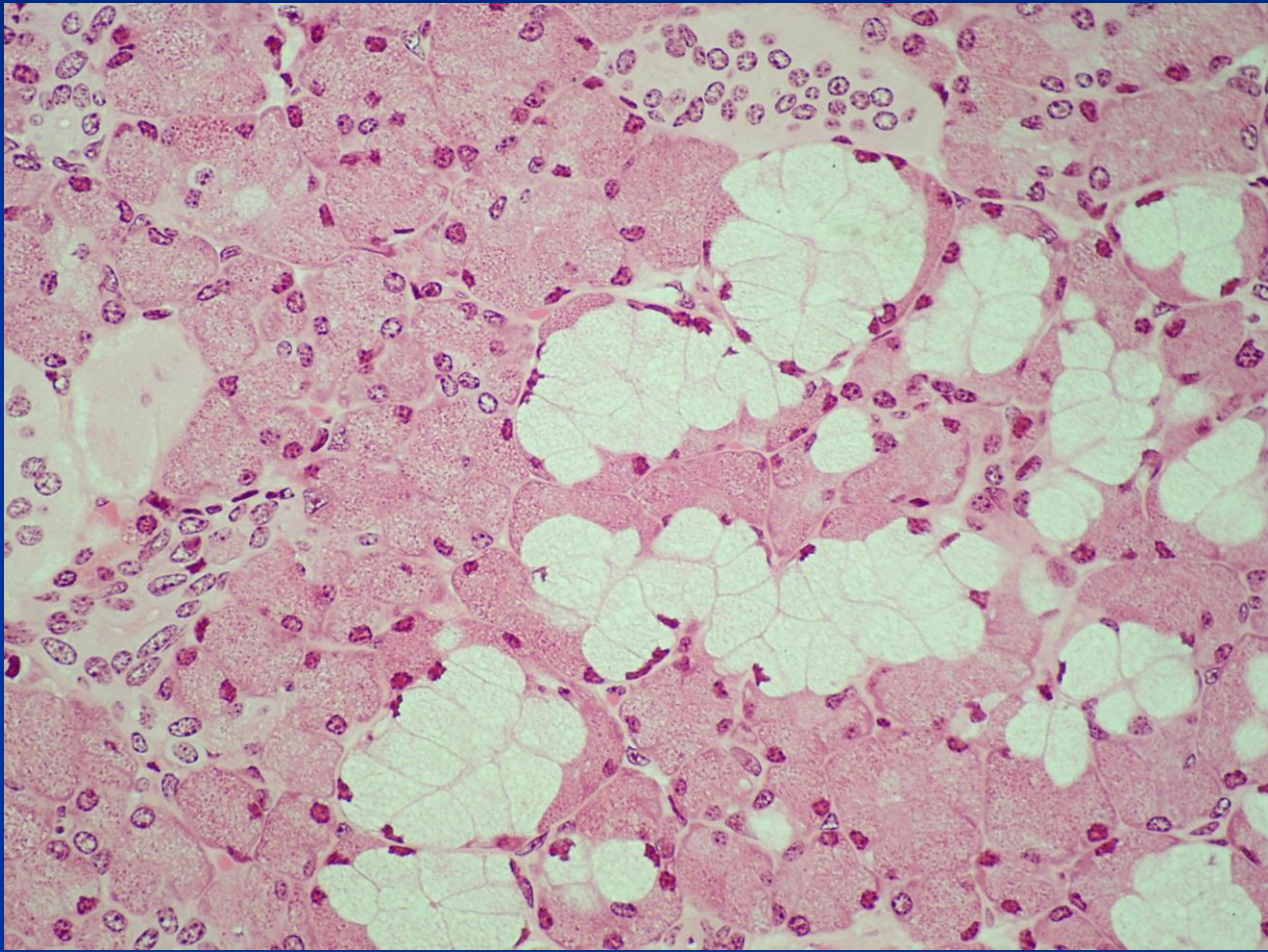


Seromucous gland(mixed)



Submandibular gland

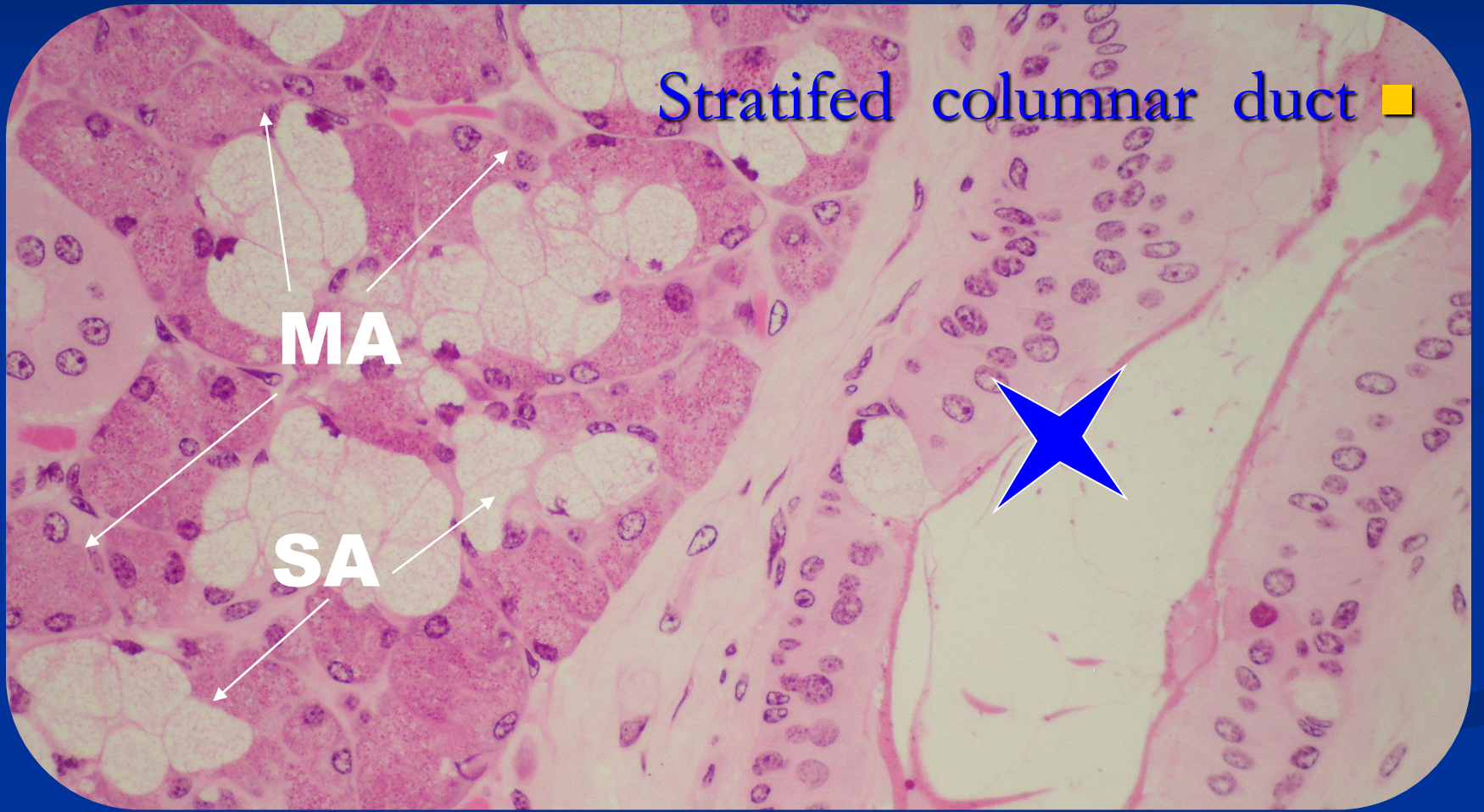




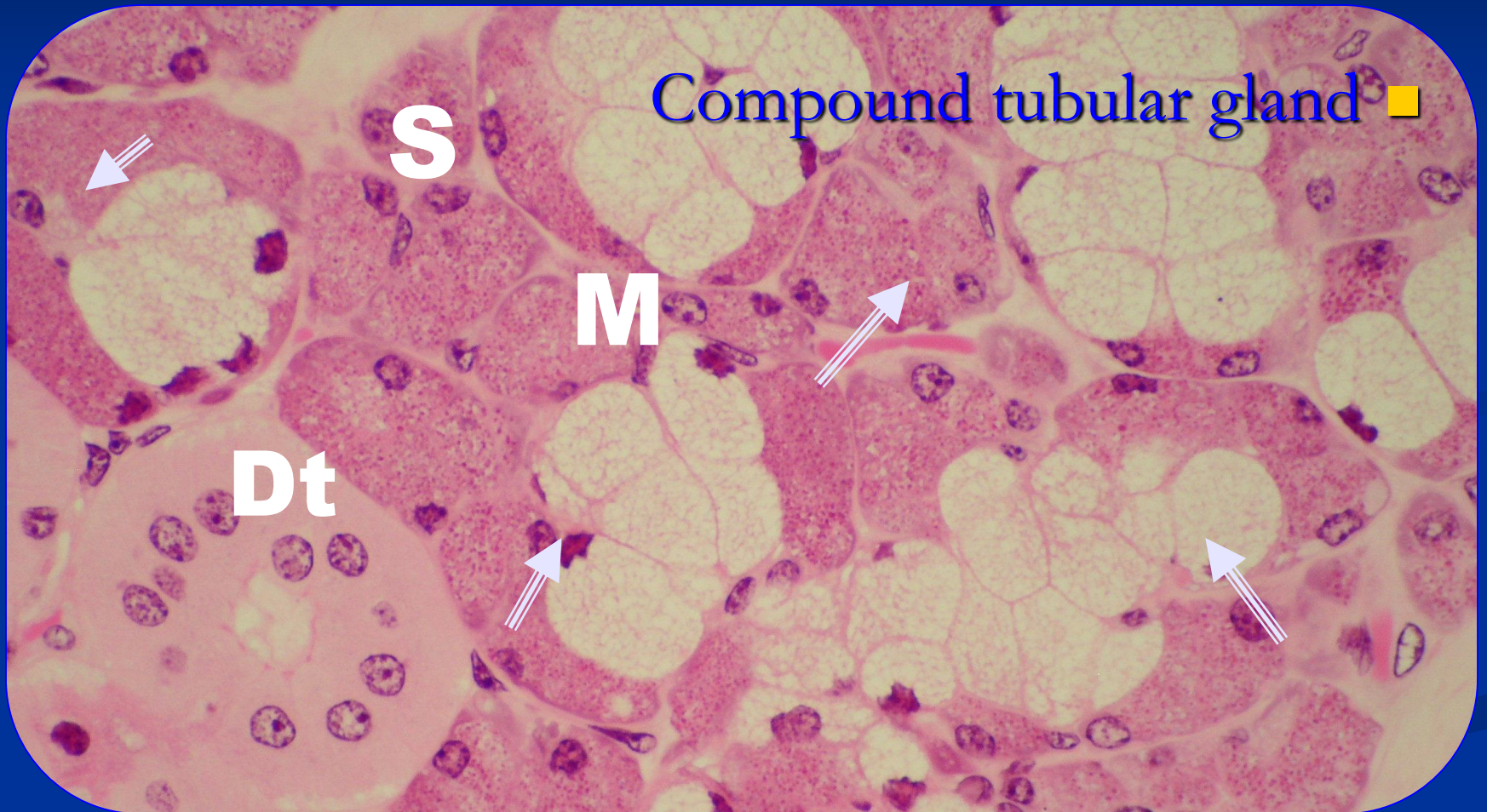
Stratified columnar duct ■

MA

SA

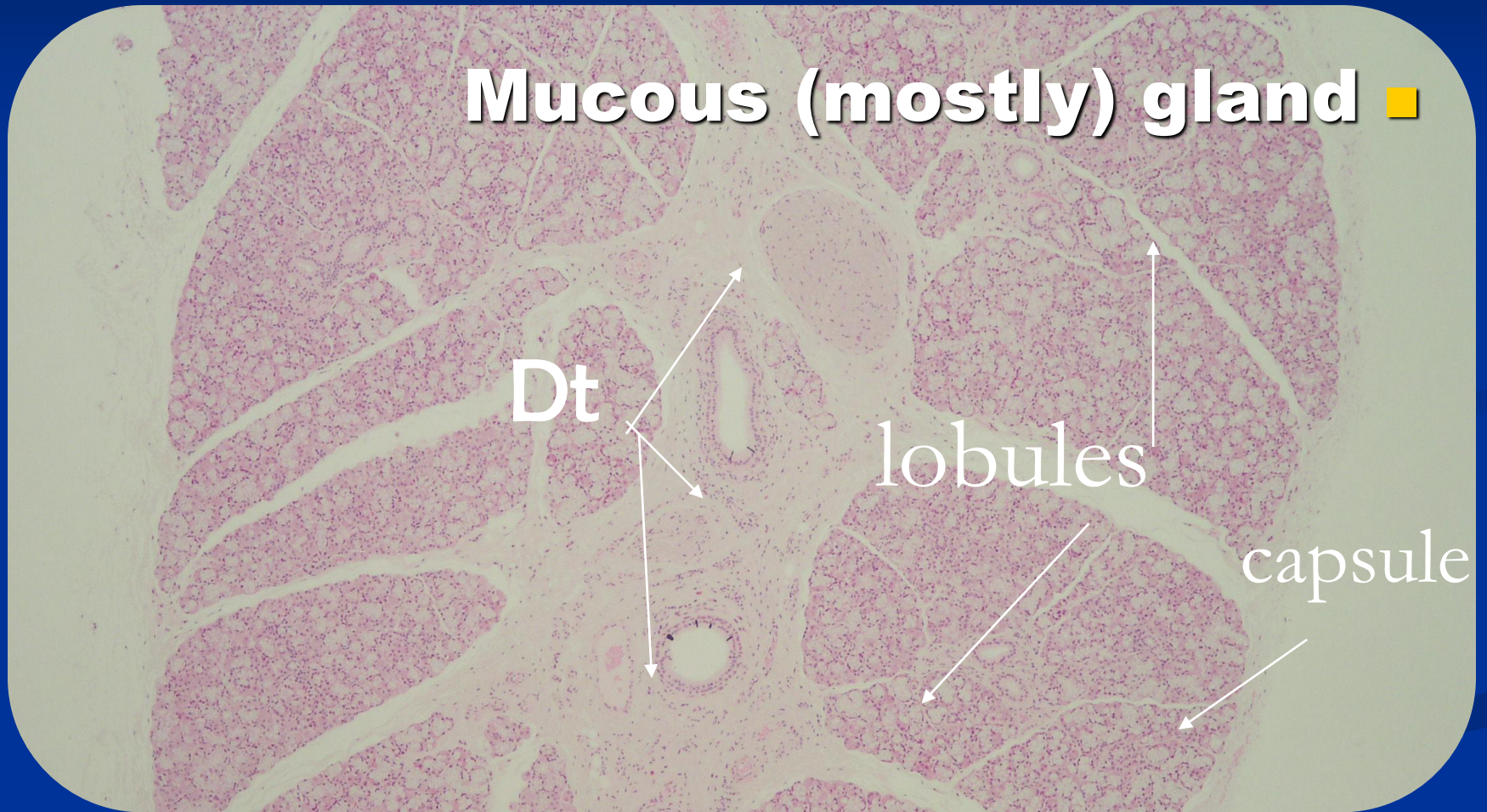


Serous demilune

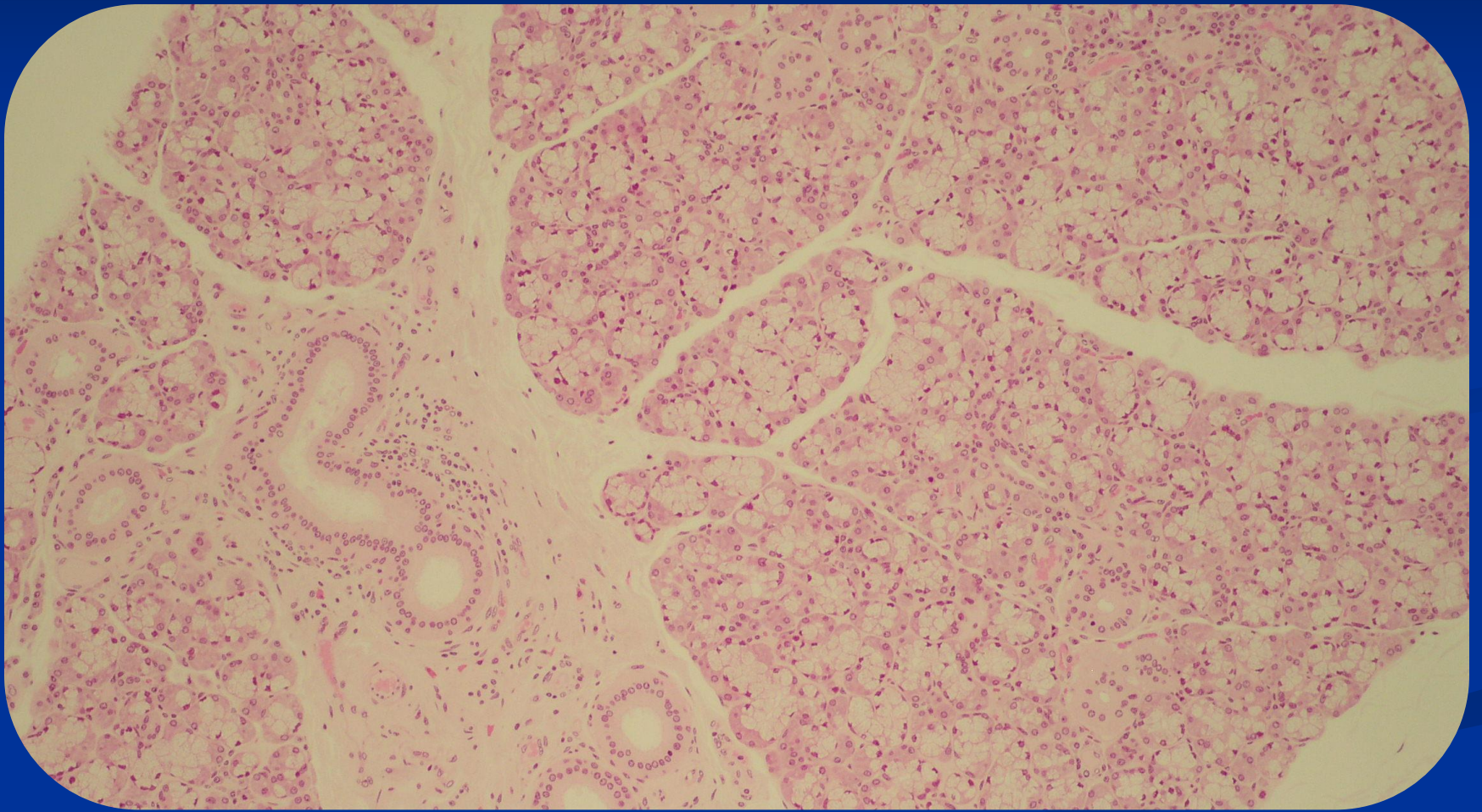


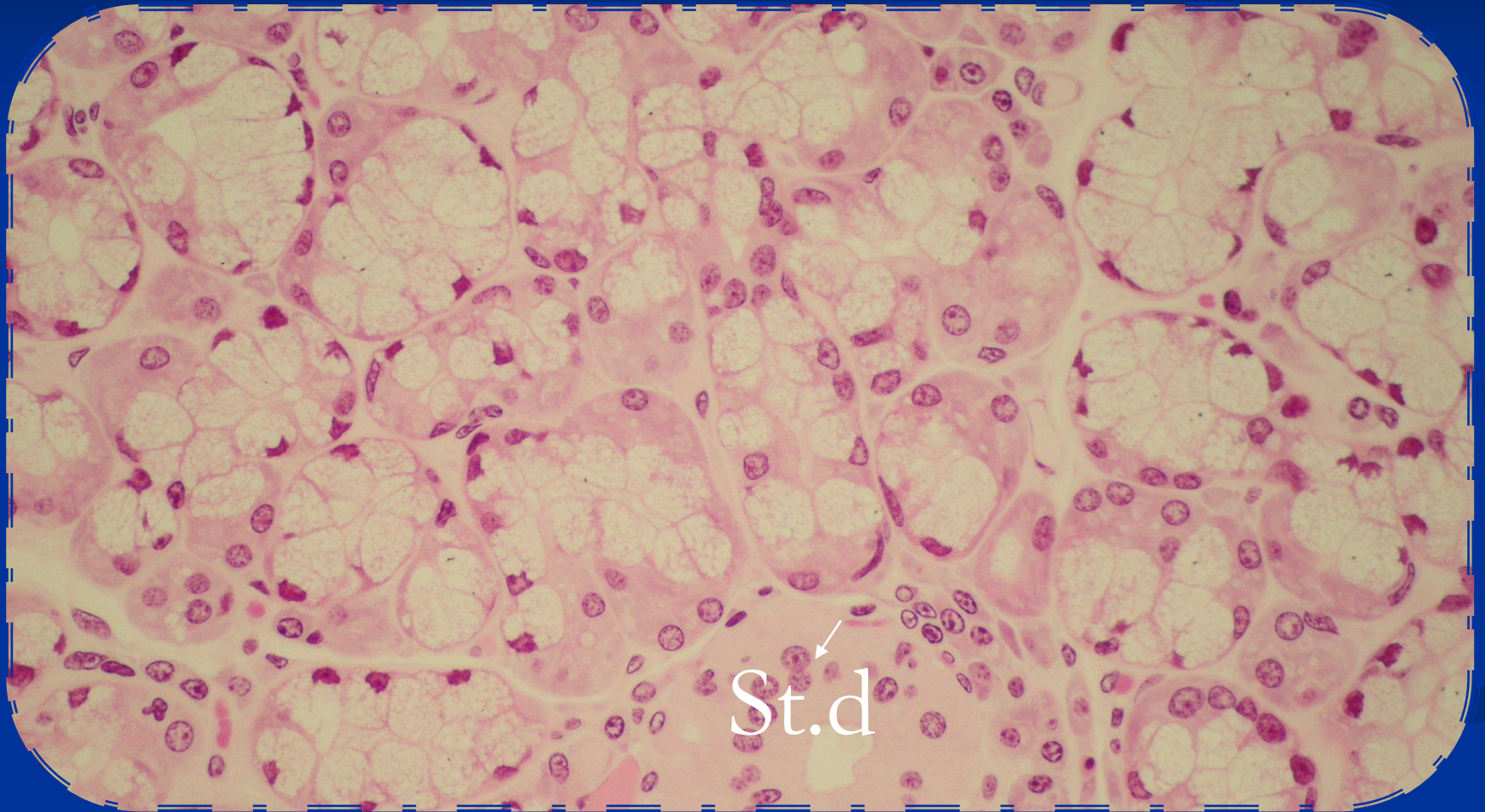
Sublingual gland

Mucous (mostly) gland ■



compound tubuloacinar gland





St.d

Serous demilune ■

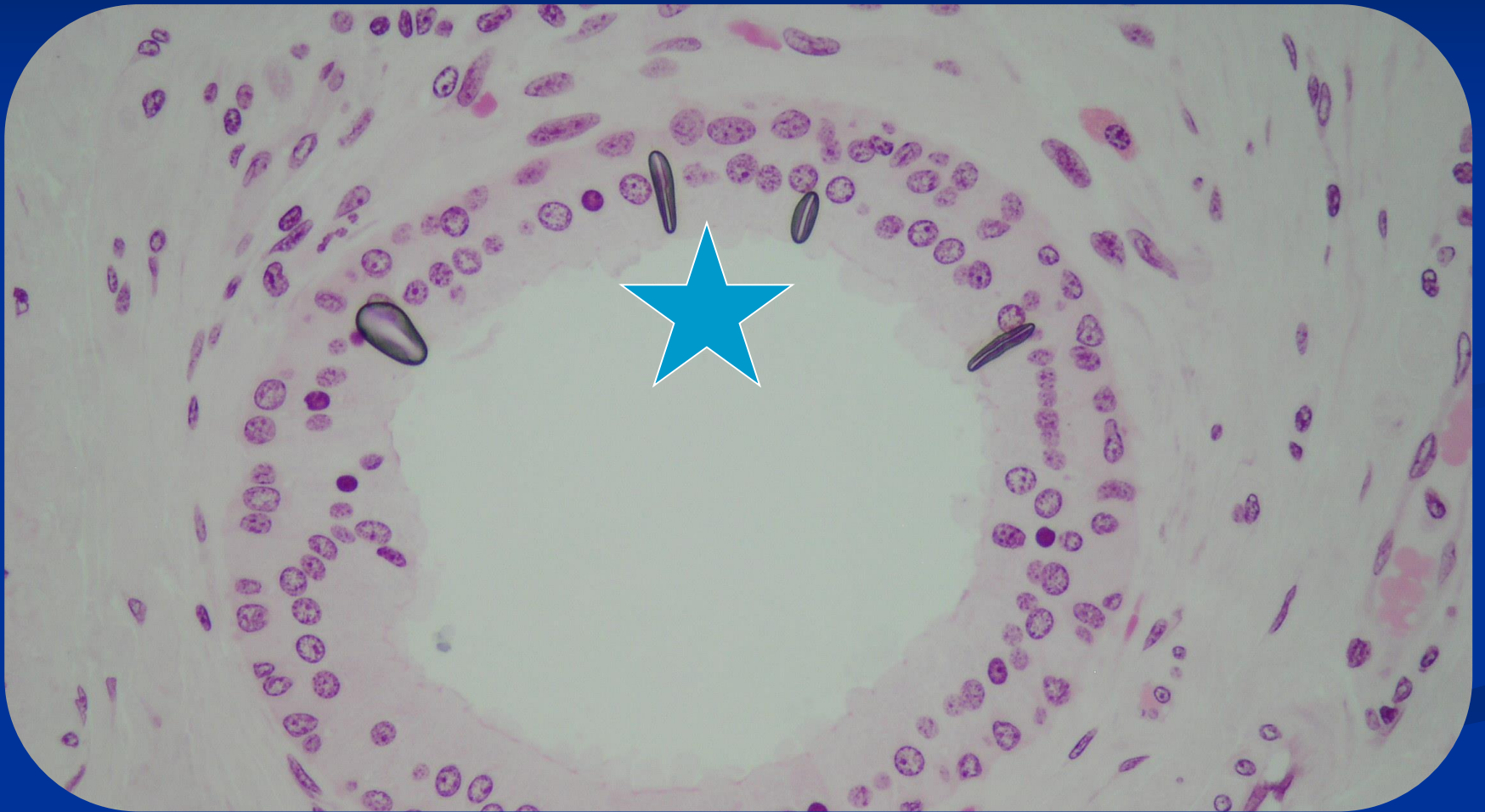
MA



Sublingual gland



Strat. cubo.epth. duct



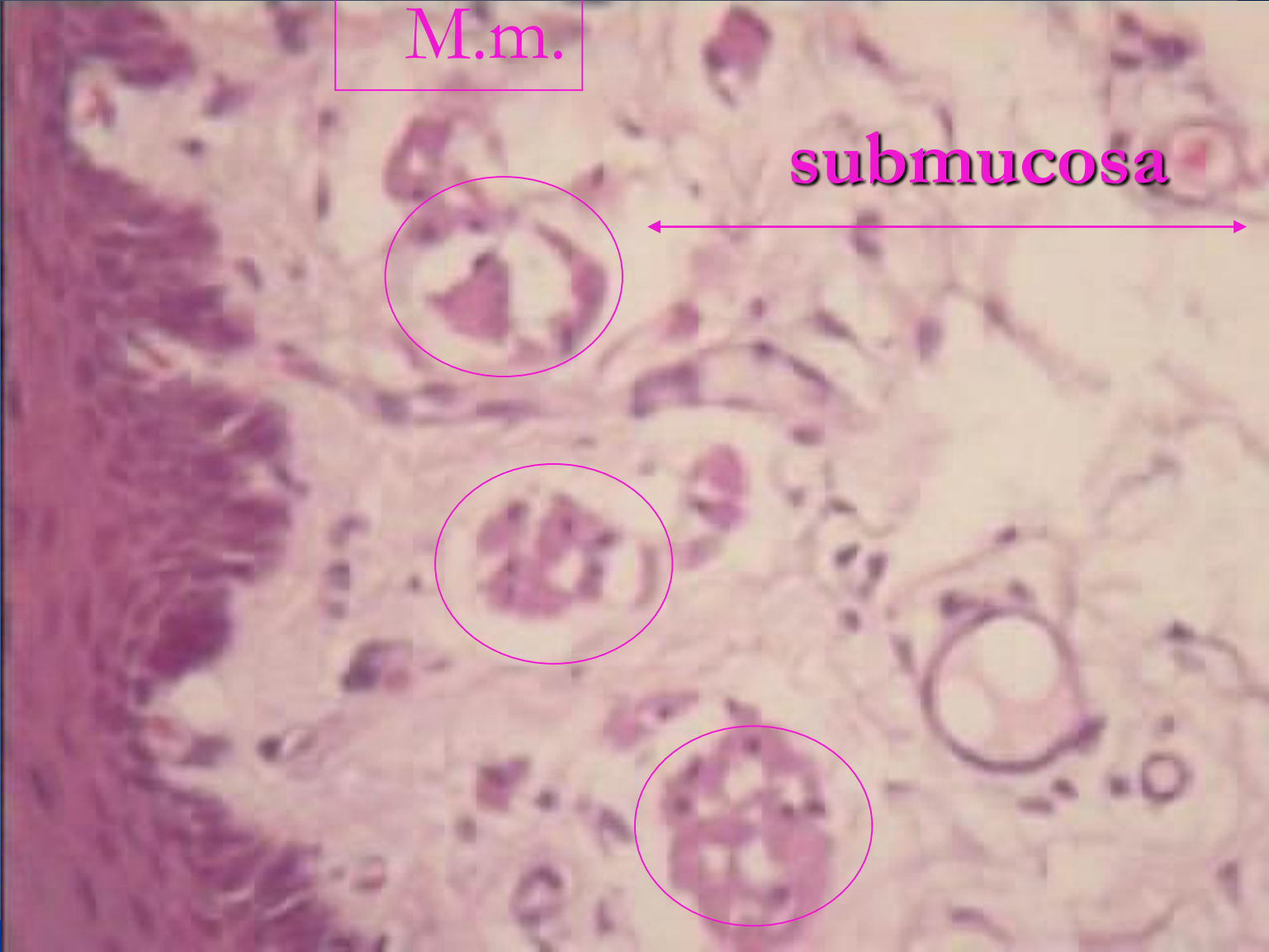
Esophagus

Esophagus (star lumen)

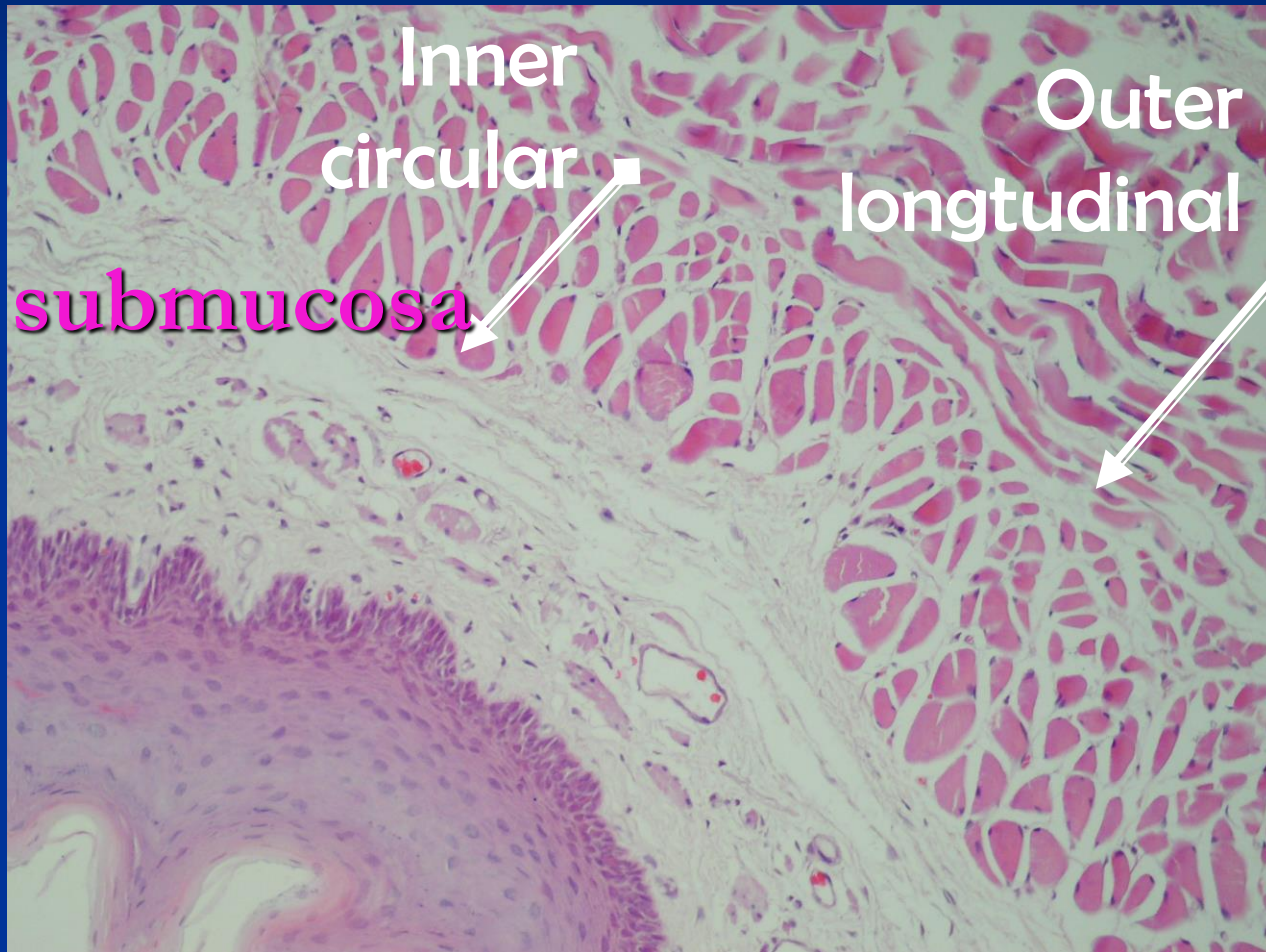


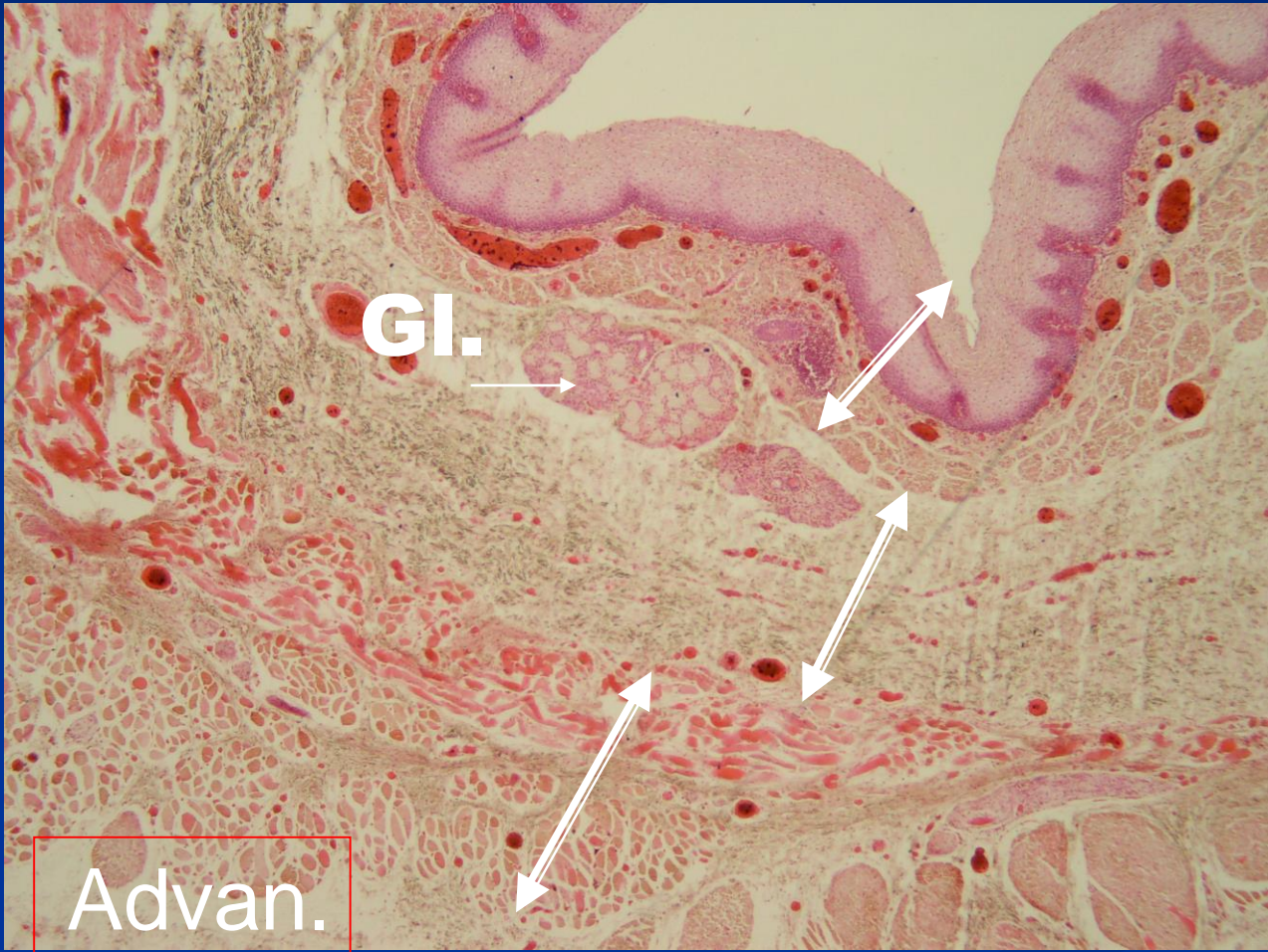
M.m.

submucosa

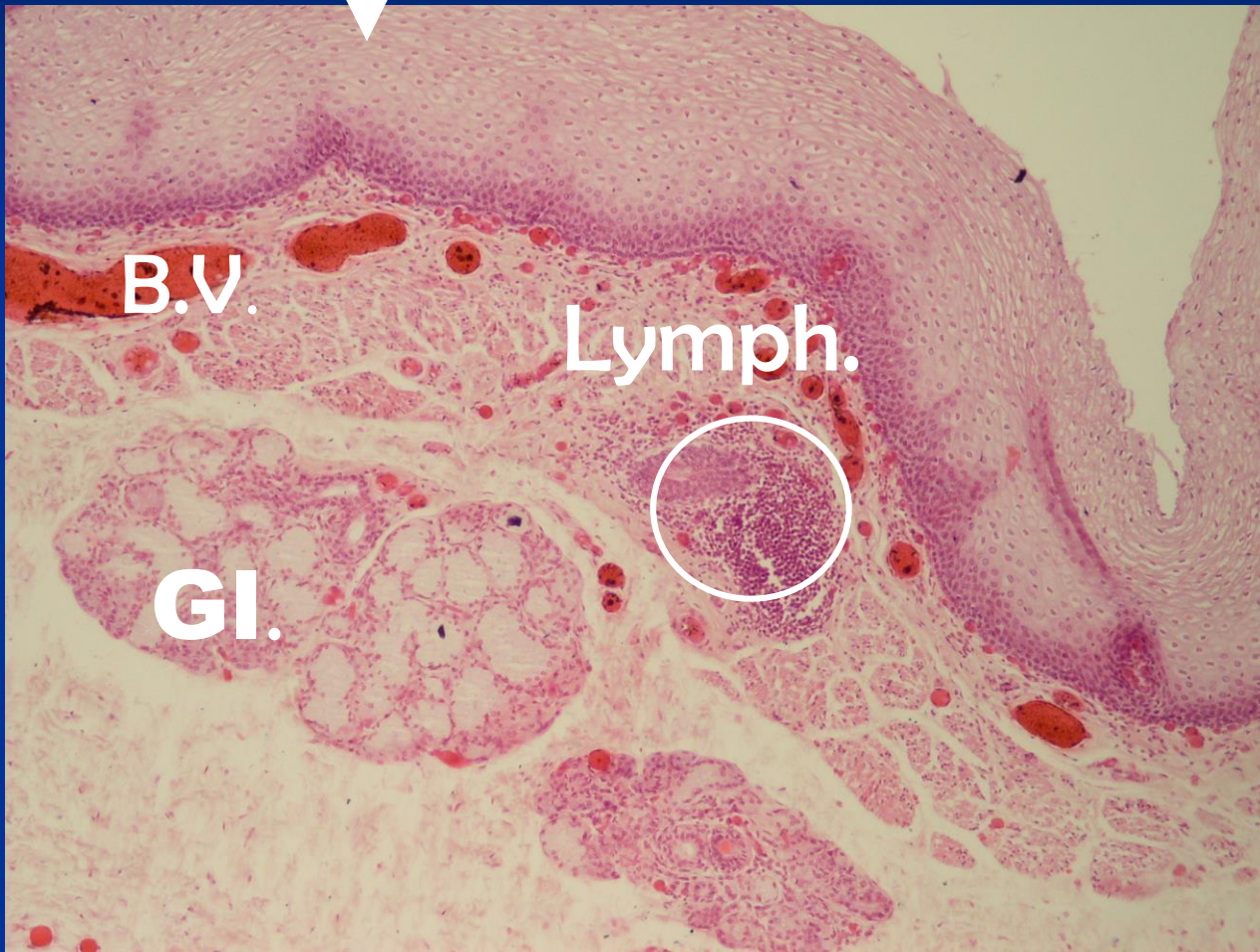


Esophagus(upper third) skeletal muscle mus. ext.

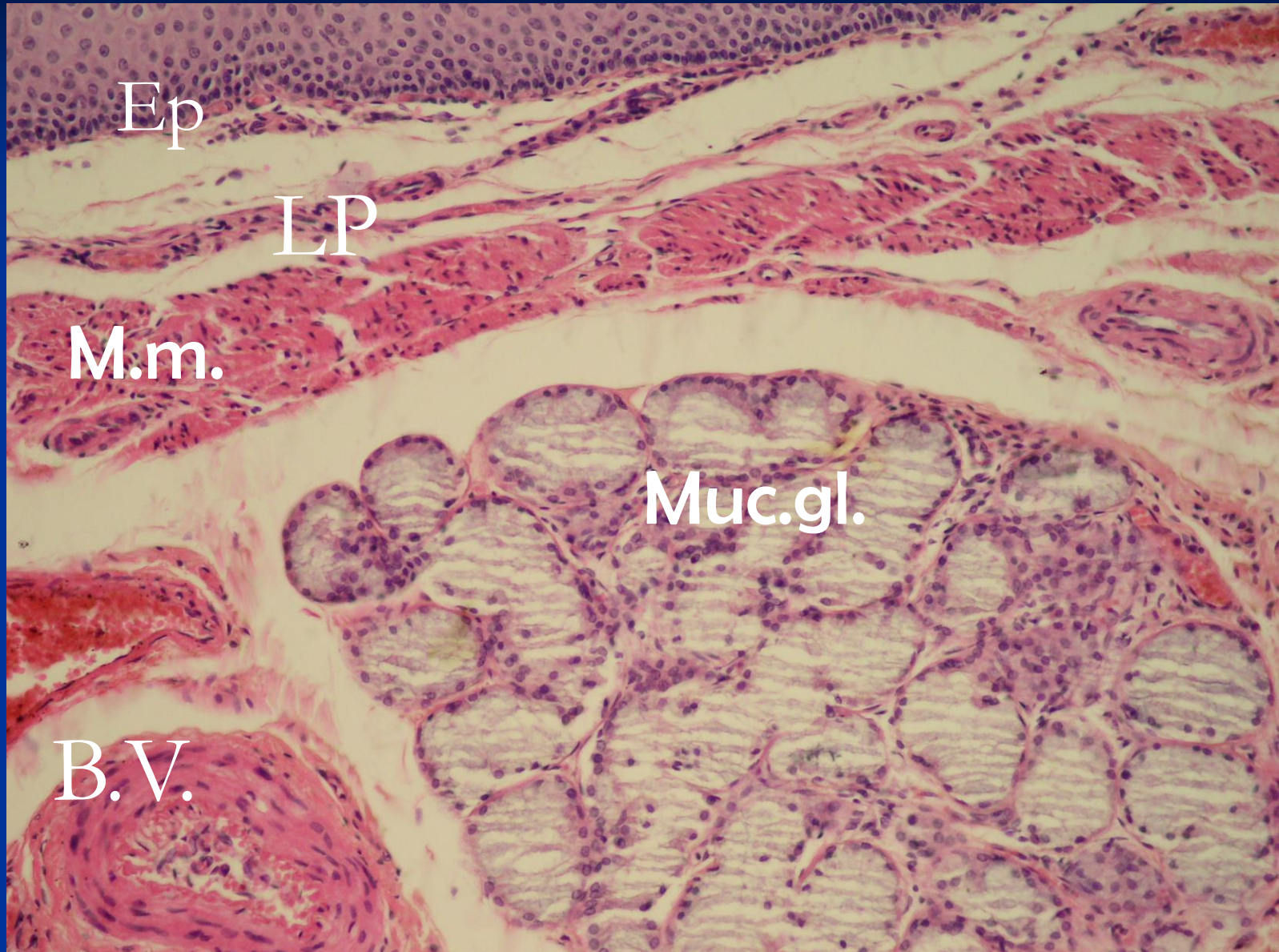




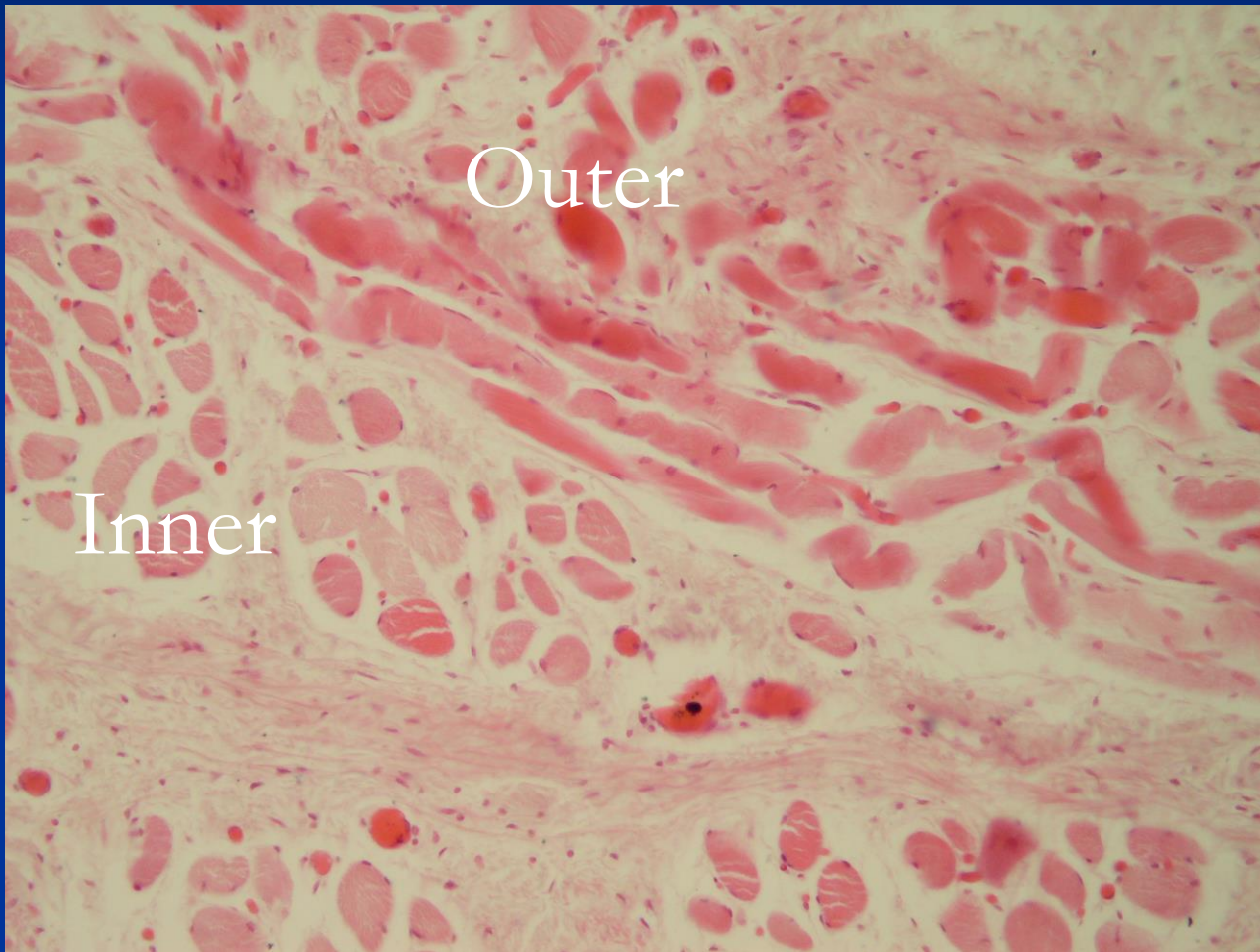
Str. Squa.epi.non ker.



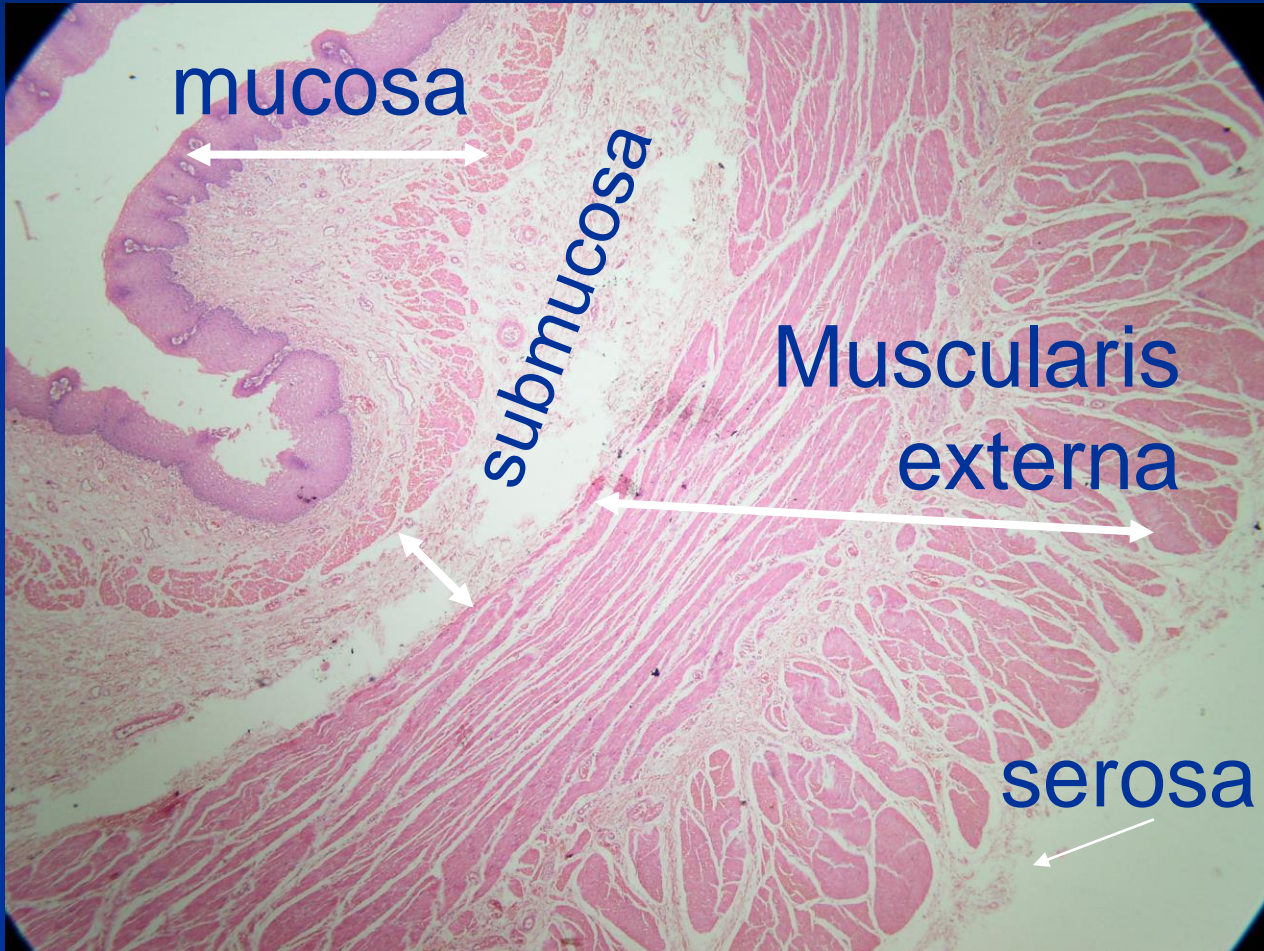
Eosophageal proper gland(in submucosa)



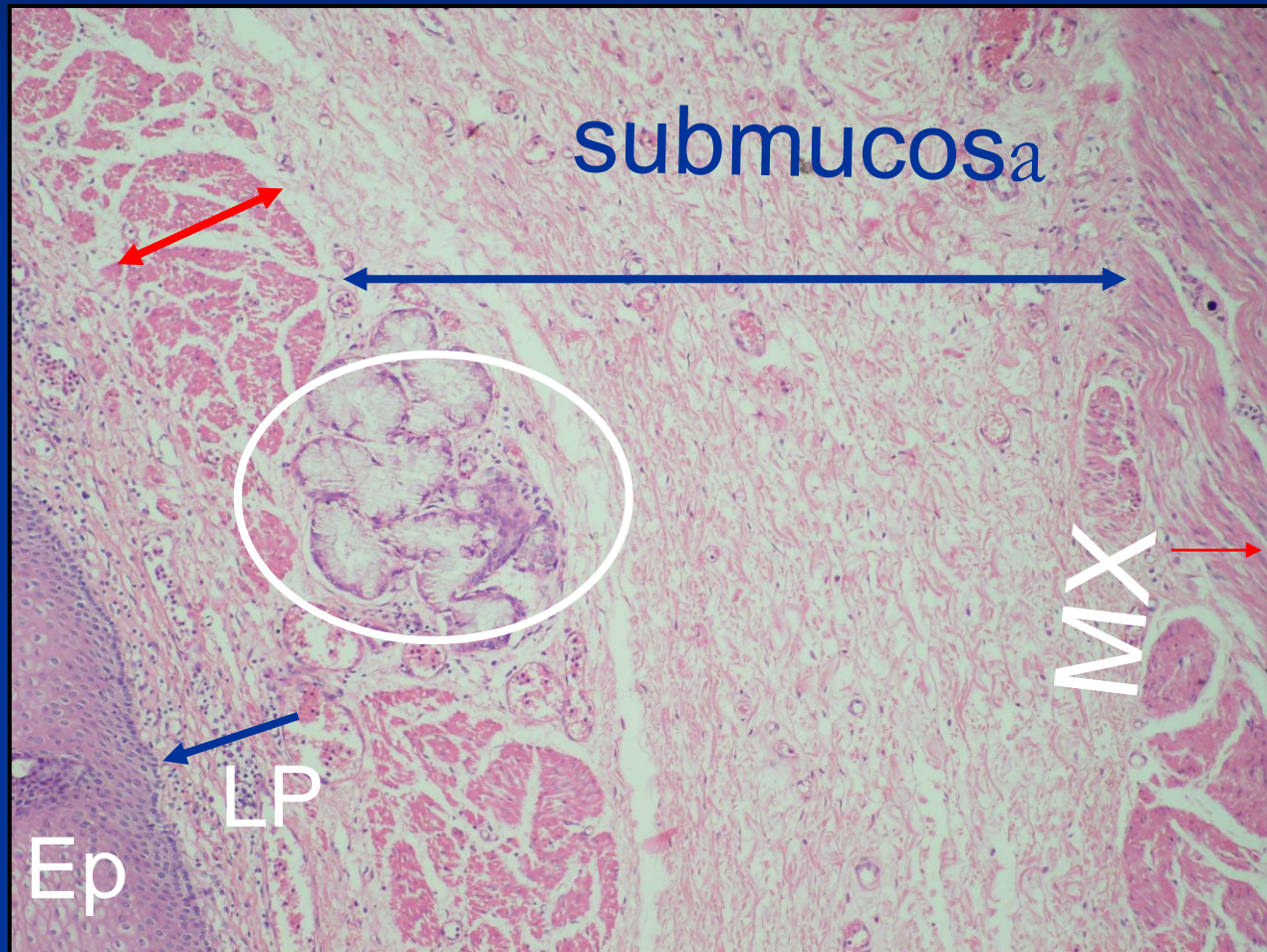
Skeletal mus.

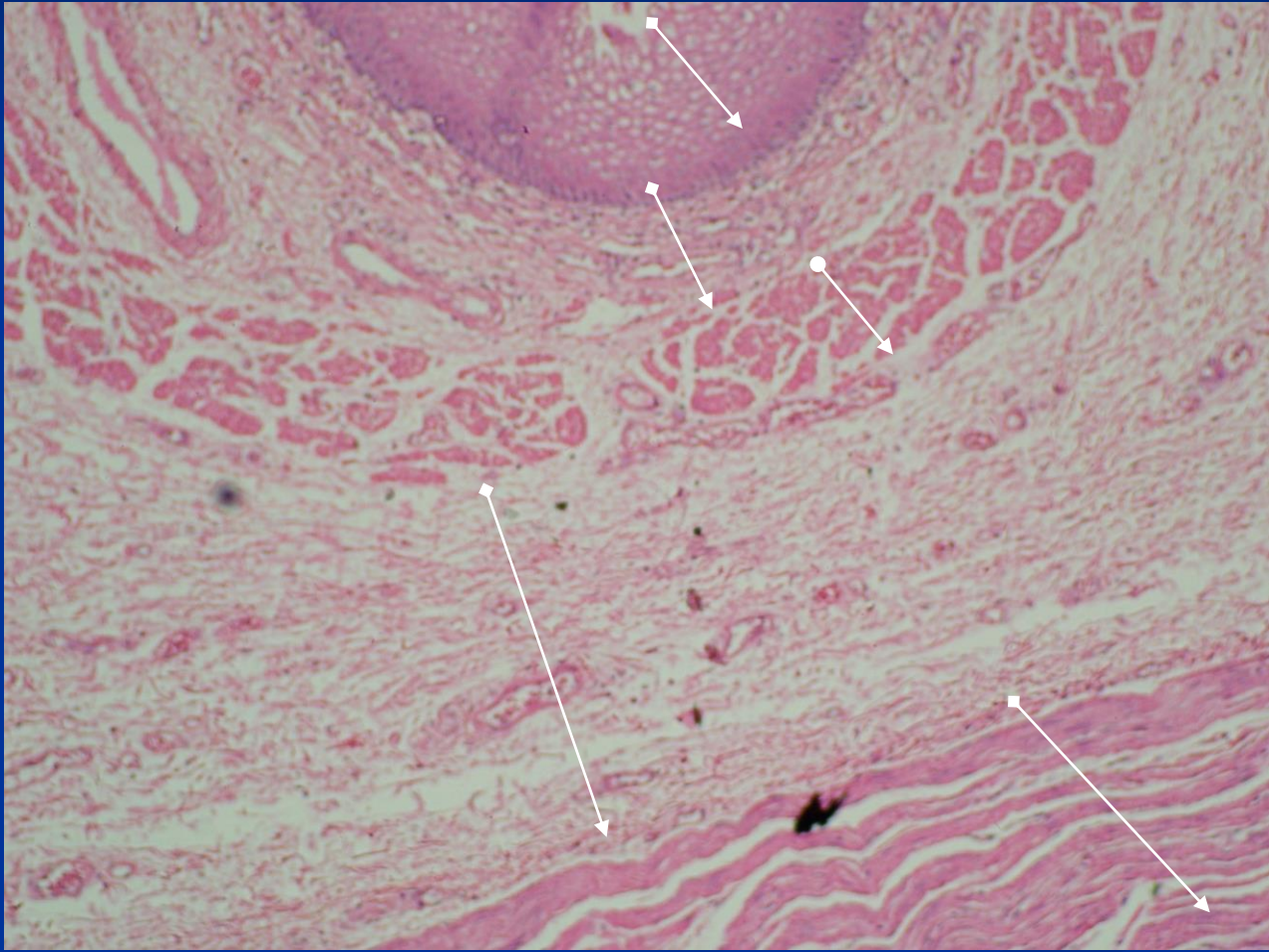


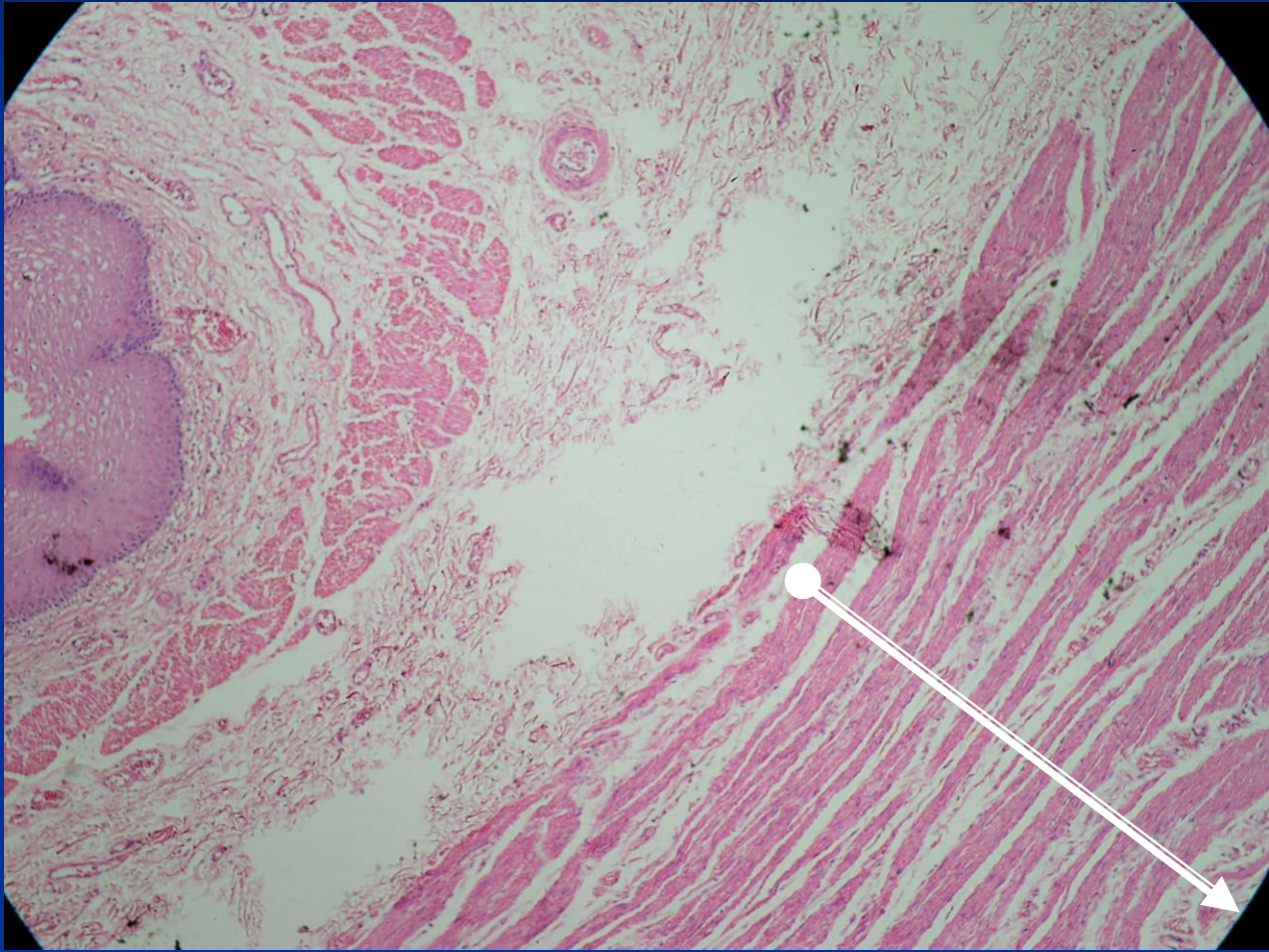
Esophagus(lower third)



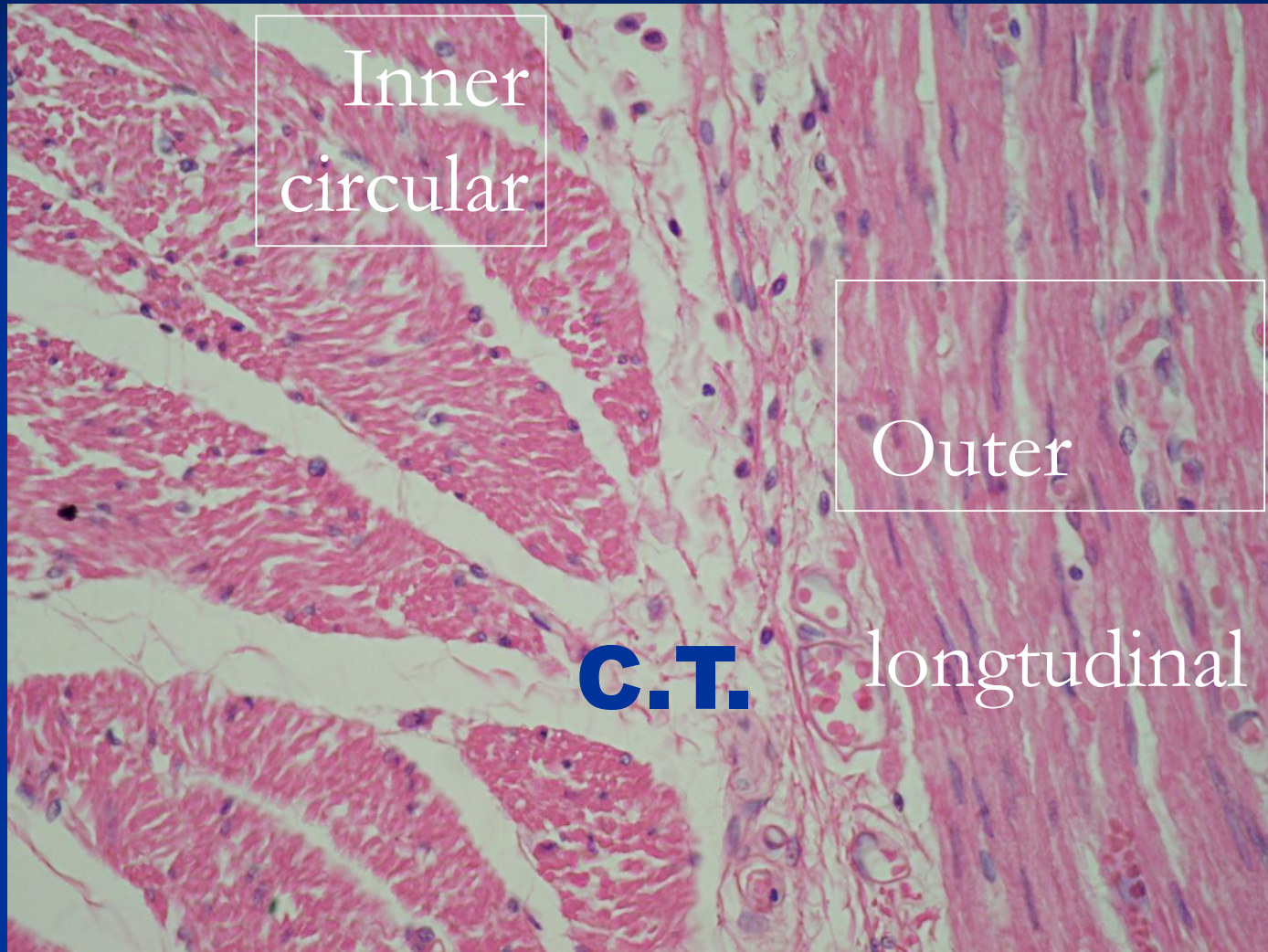
Eosophageal proper gland **muscularis mucosa**



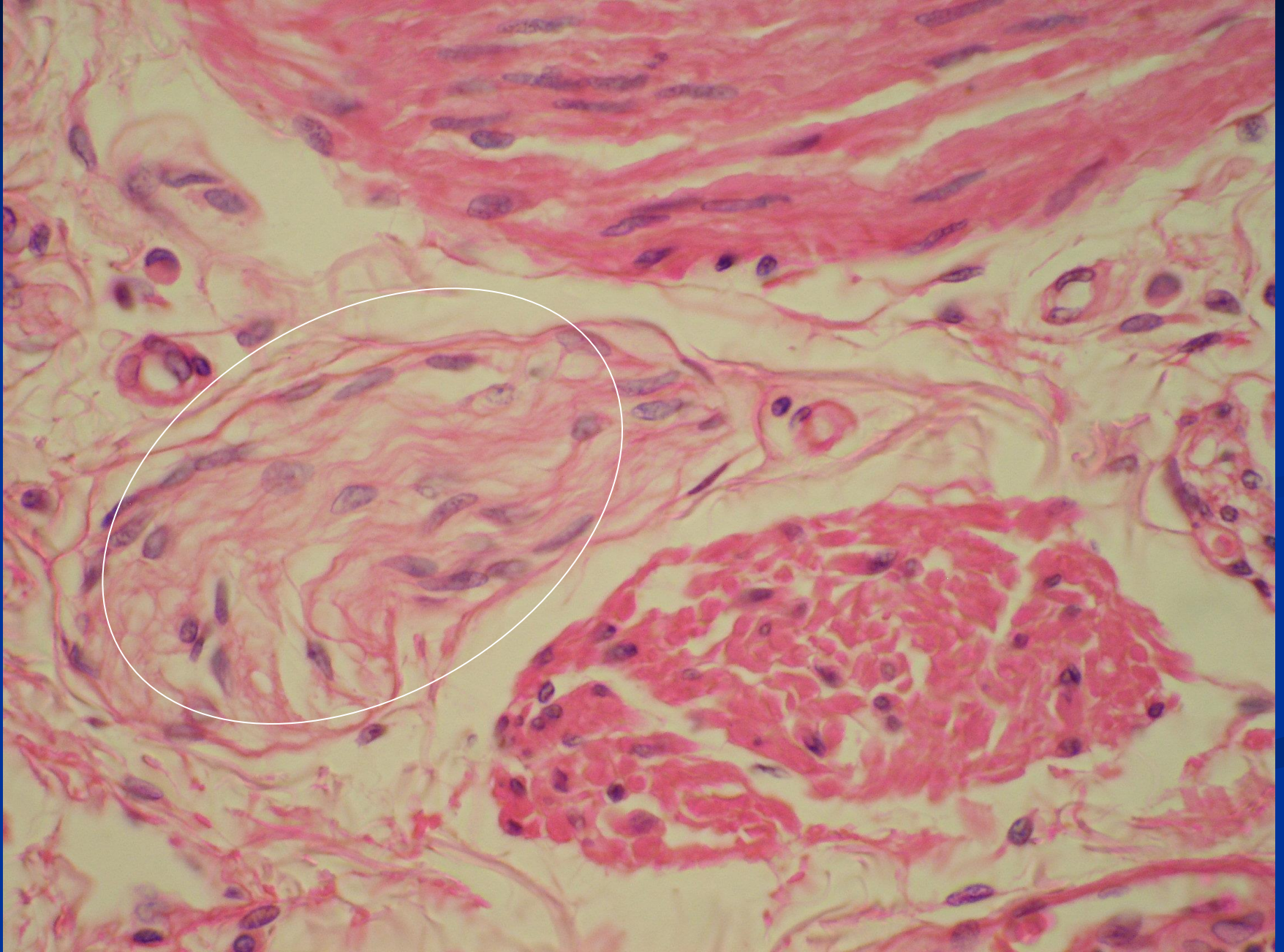




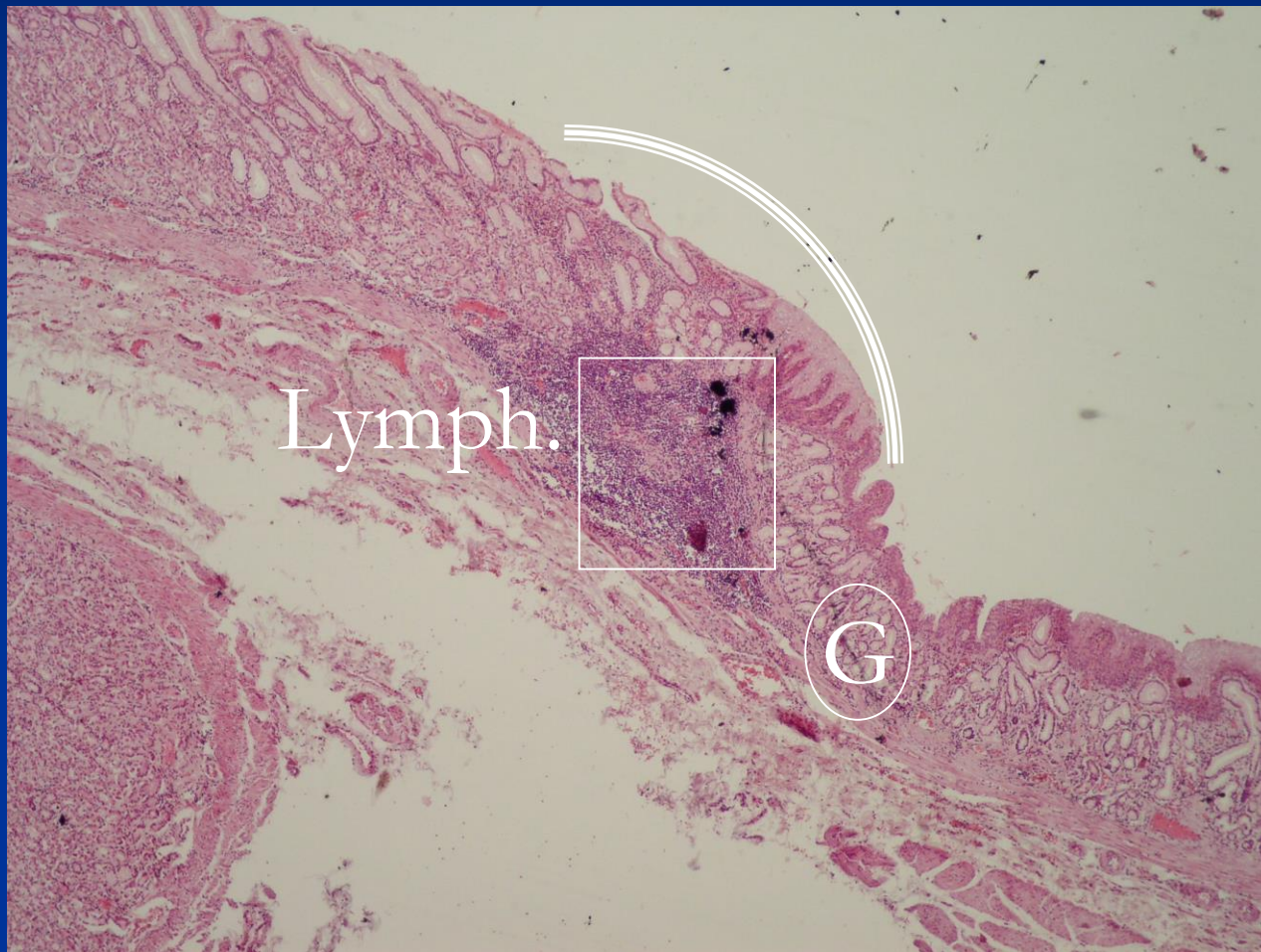
Lower third(smooth muscle)



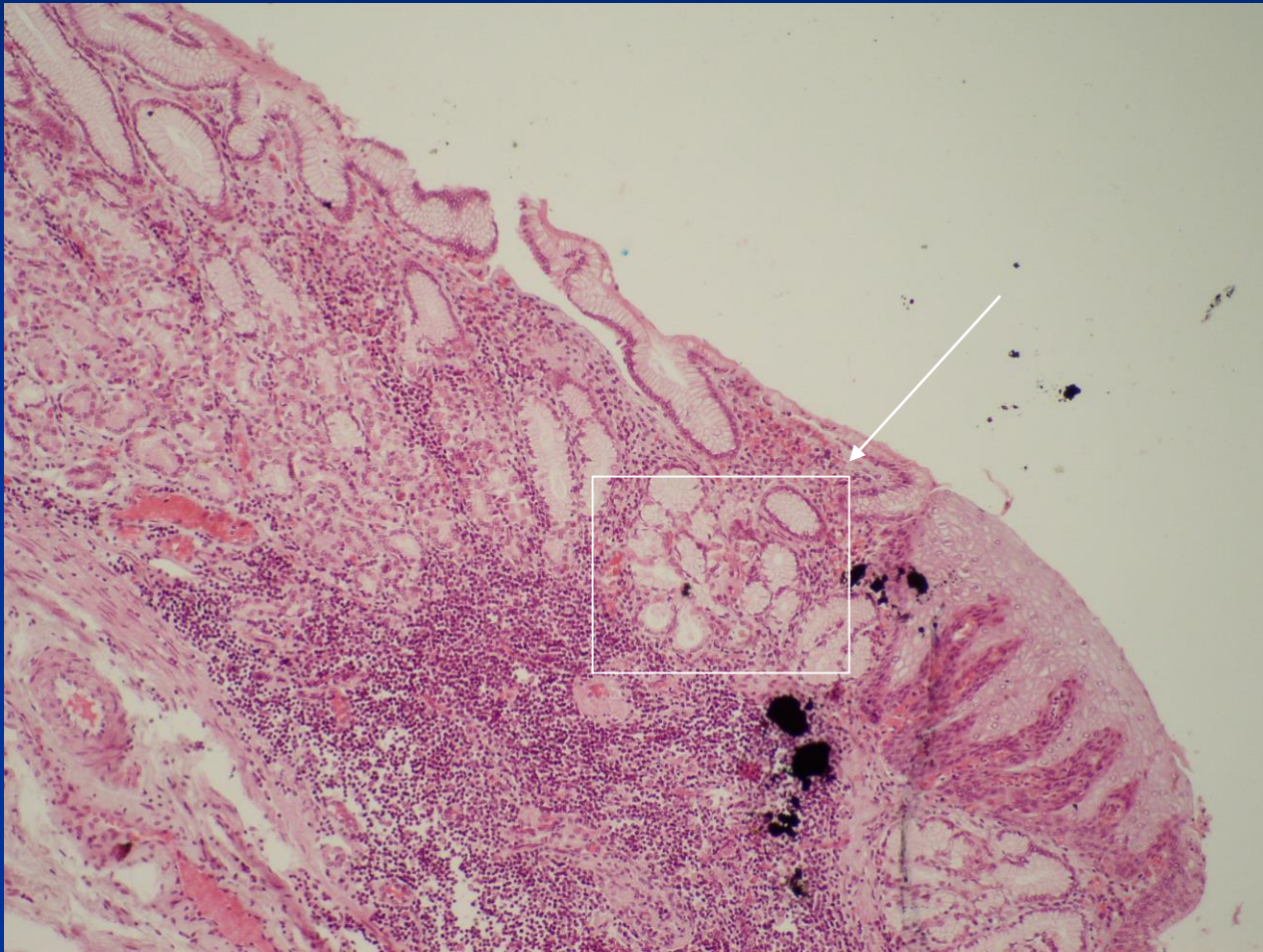
Nerve fibers



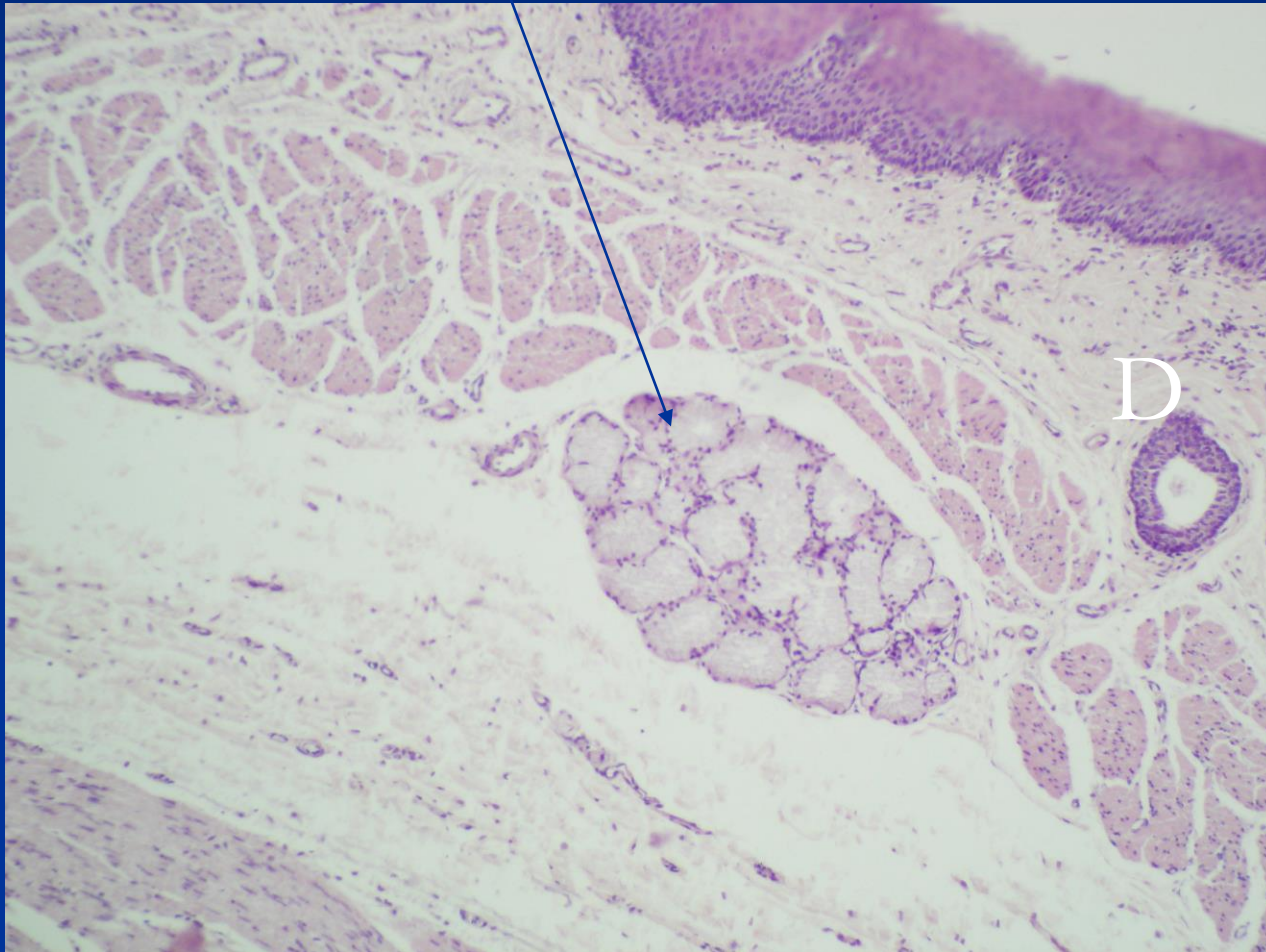
Eosophago-gastric junction



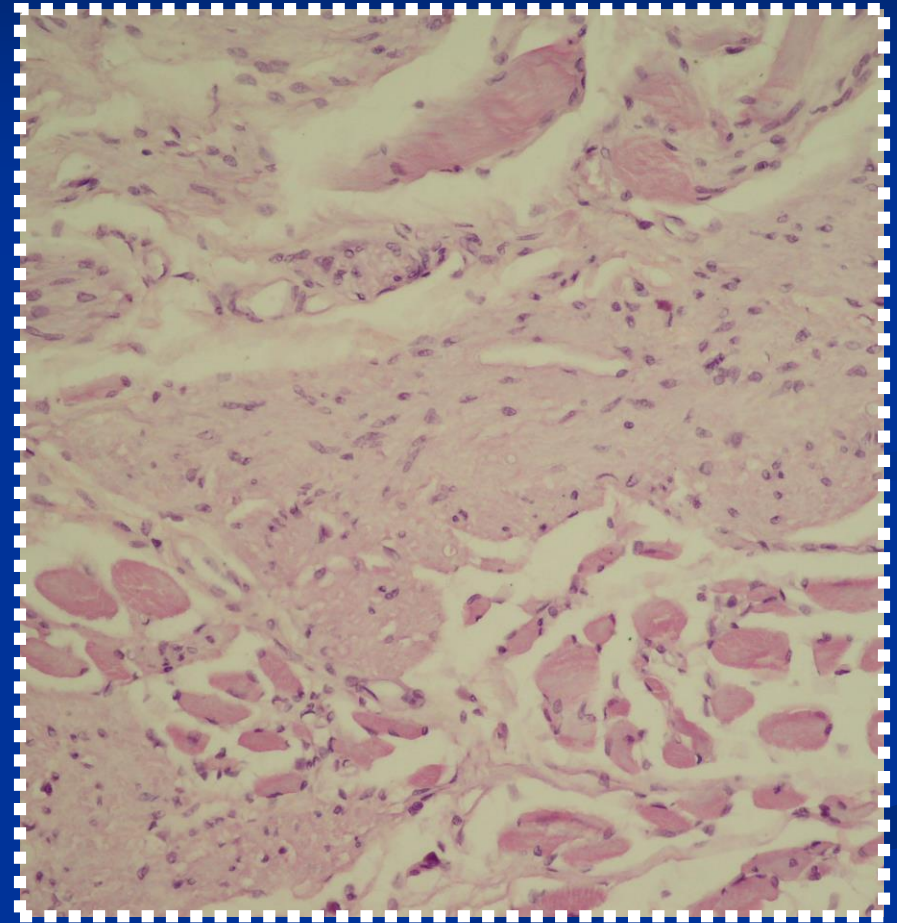
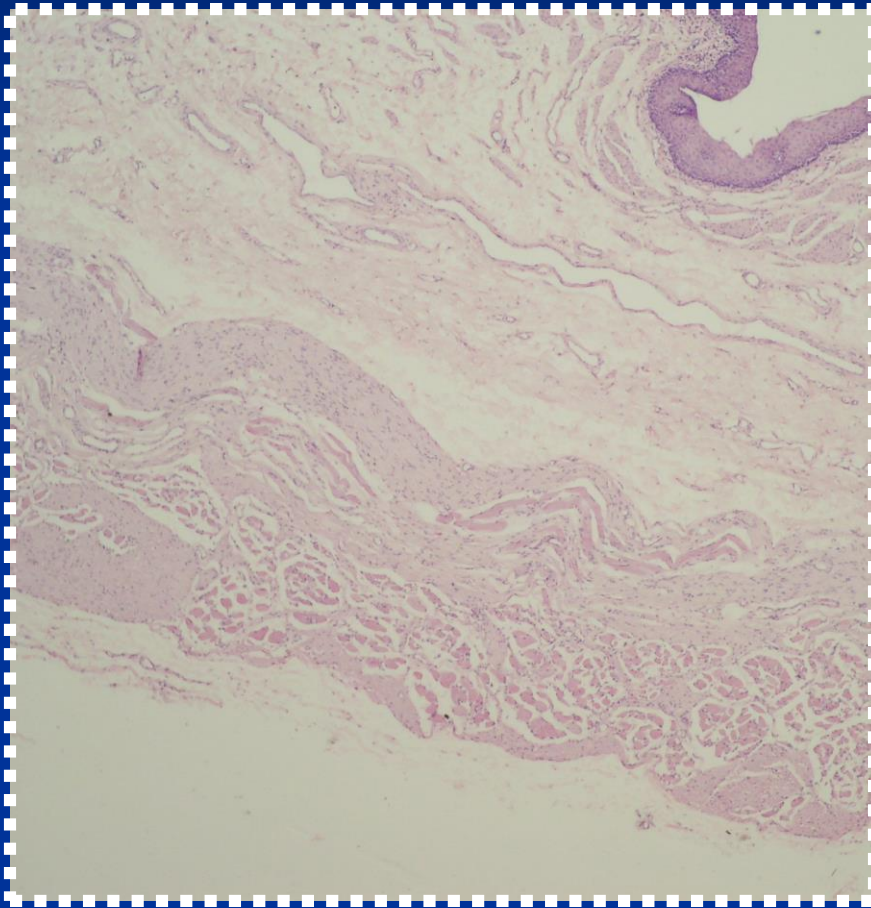
Cardiac gland in I.P. @ junction



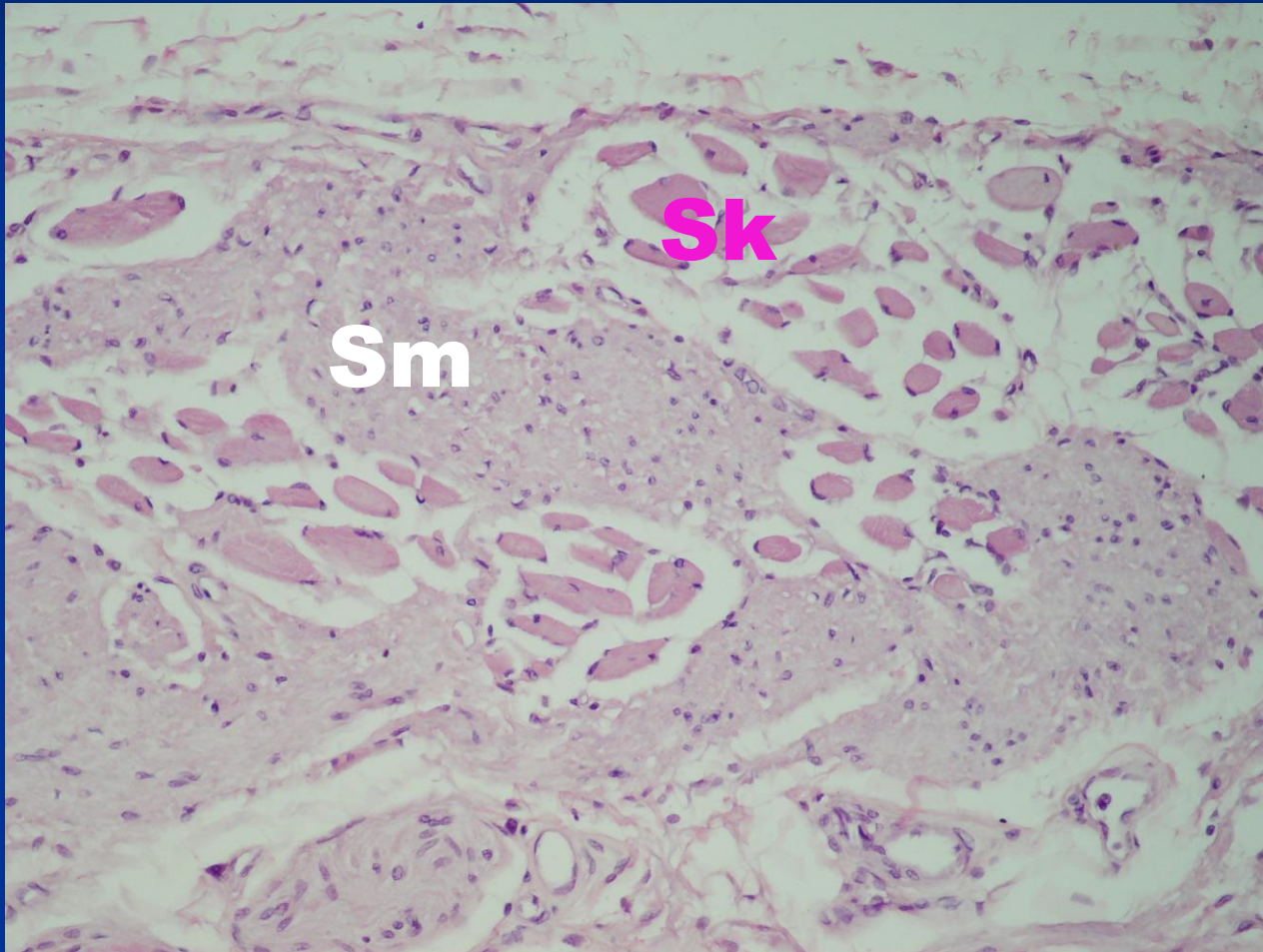
Esophageal gland proper (in submucosa)



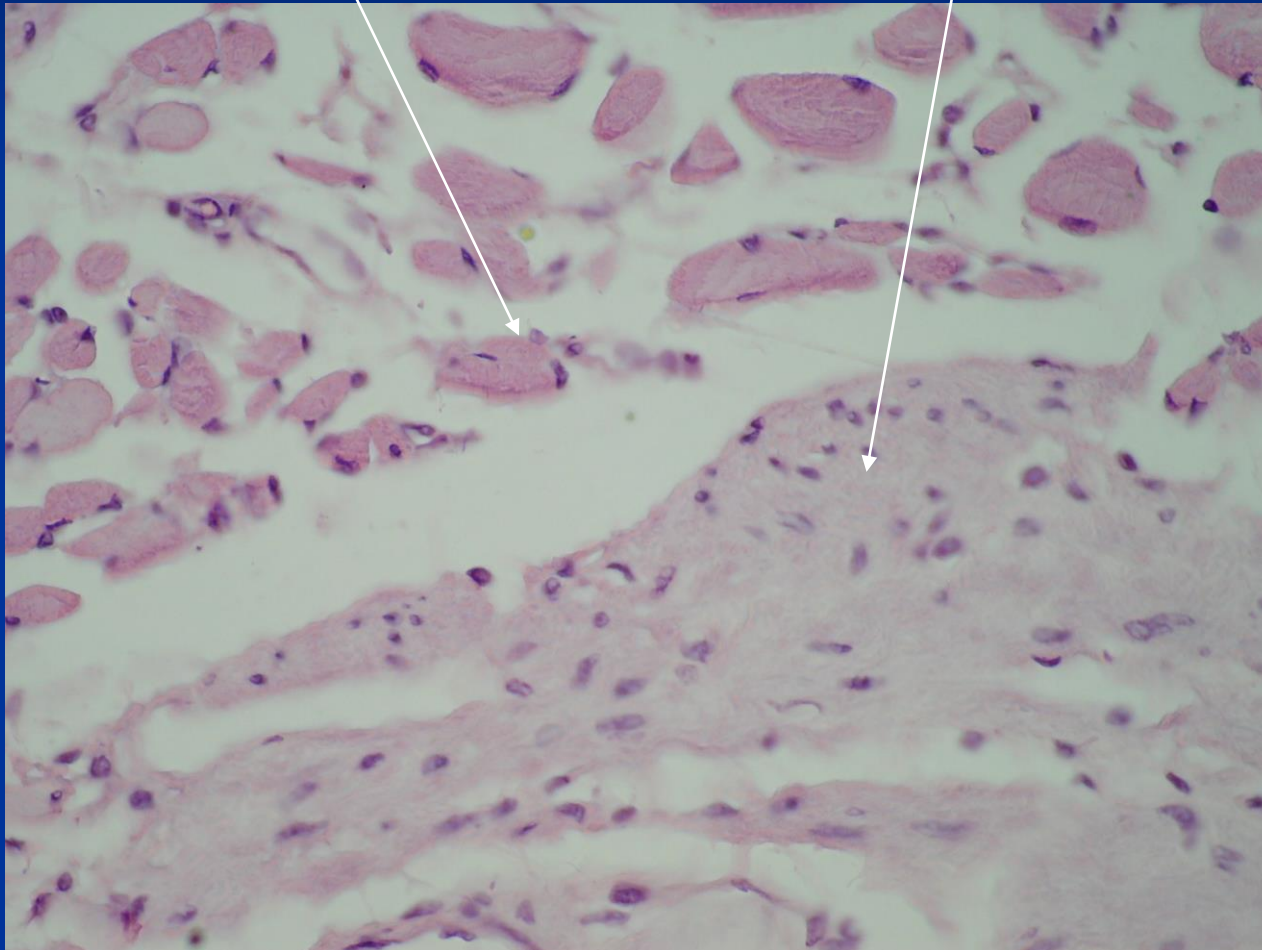
Mixed smooth&skeltal in mid. eOsoph.



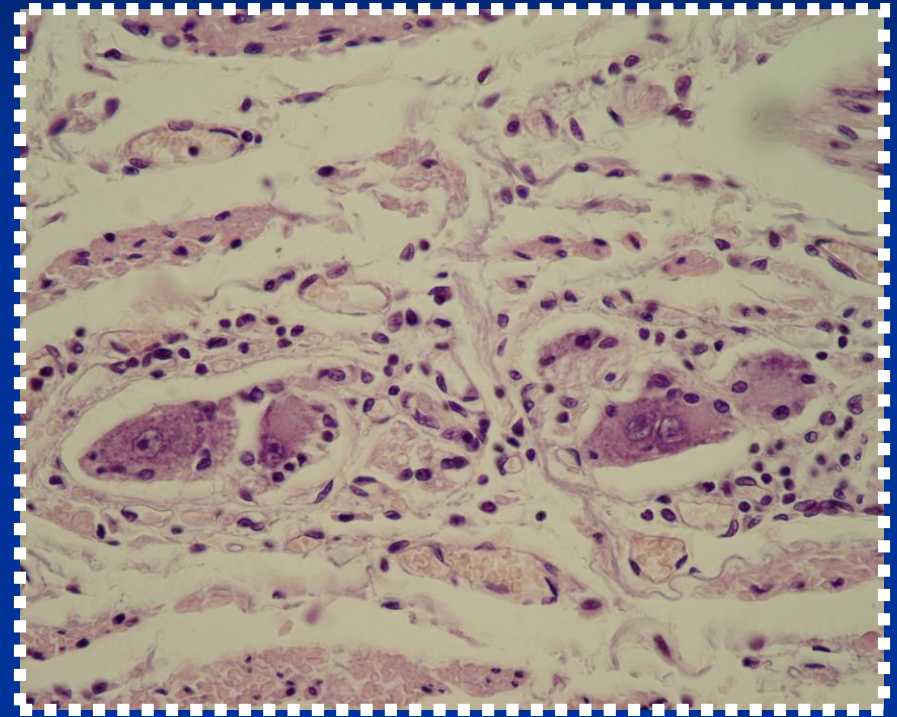
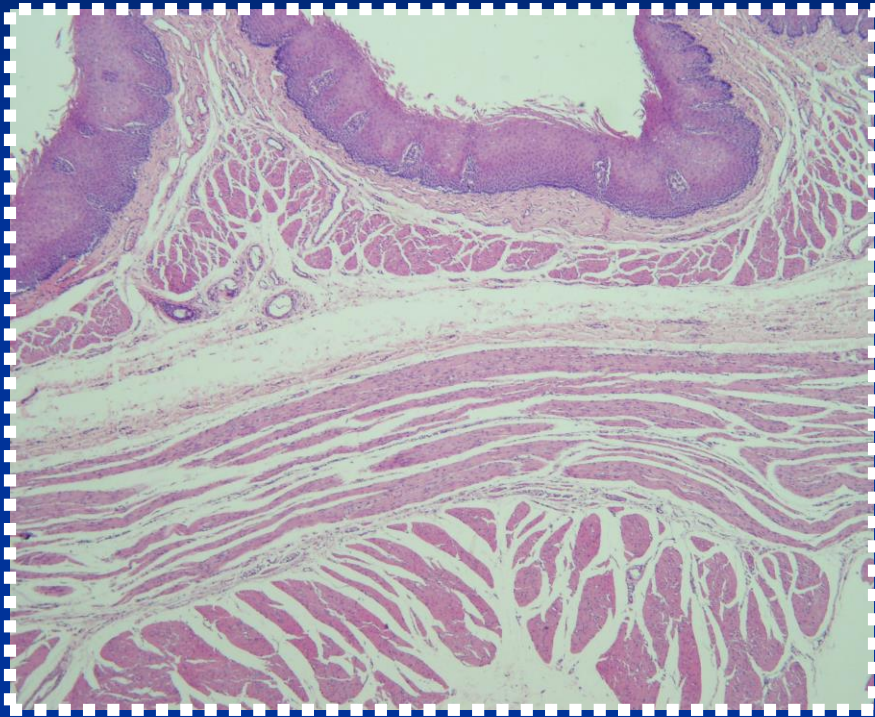
Smooth skeletal muscle



Mixed skeletal and smooth muscle



intramural Parasympathetic ganglion- (G.I.T.)

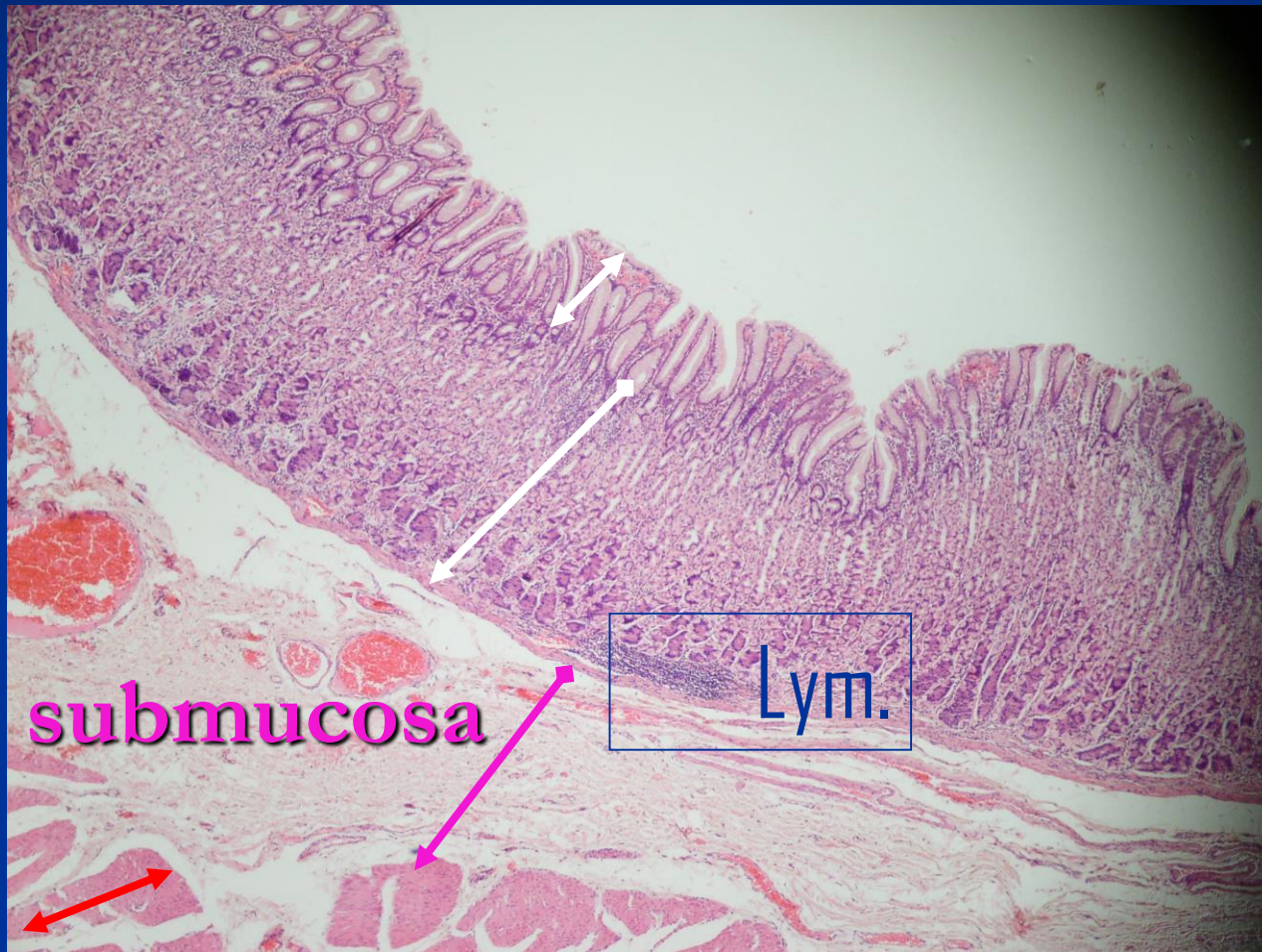


Stomach

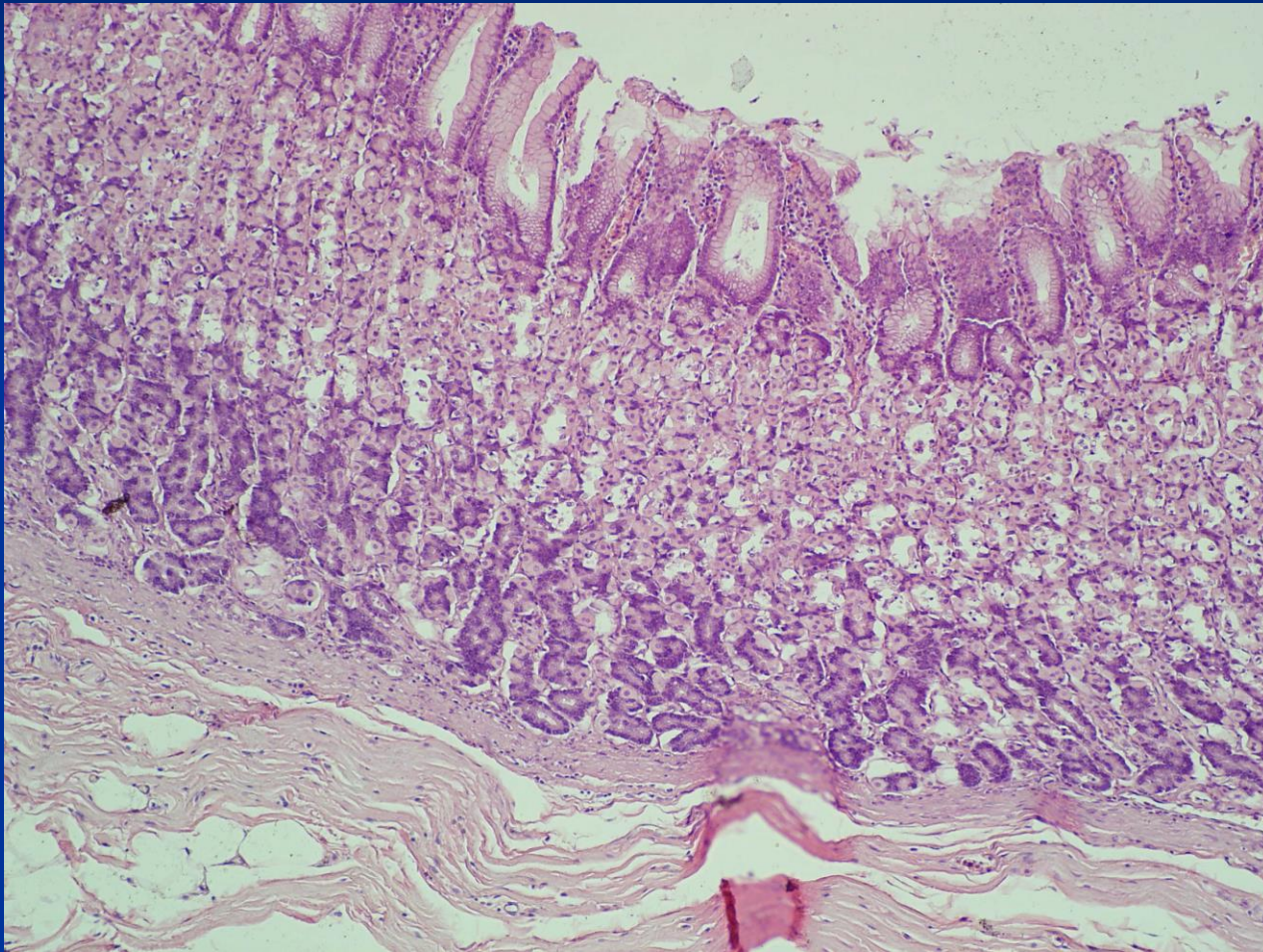
Rugae(stomach):mucosa+submucosa



-mucous membrane:
gastric pit+l.p+mus.mucosa

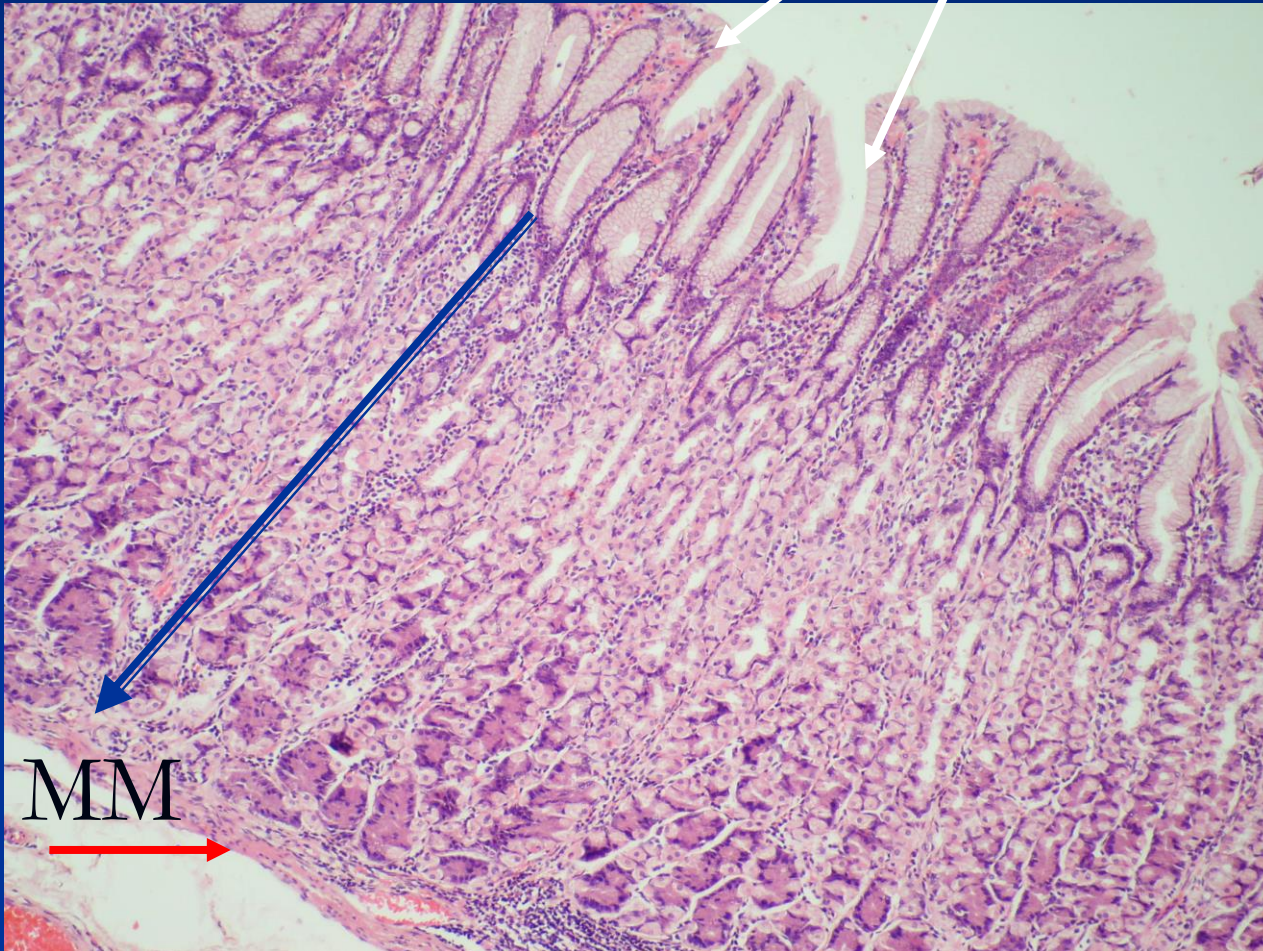


Fundus or body of stomach

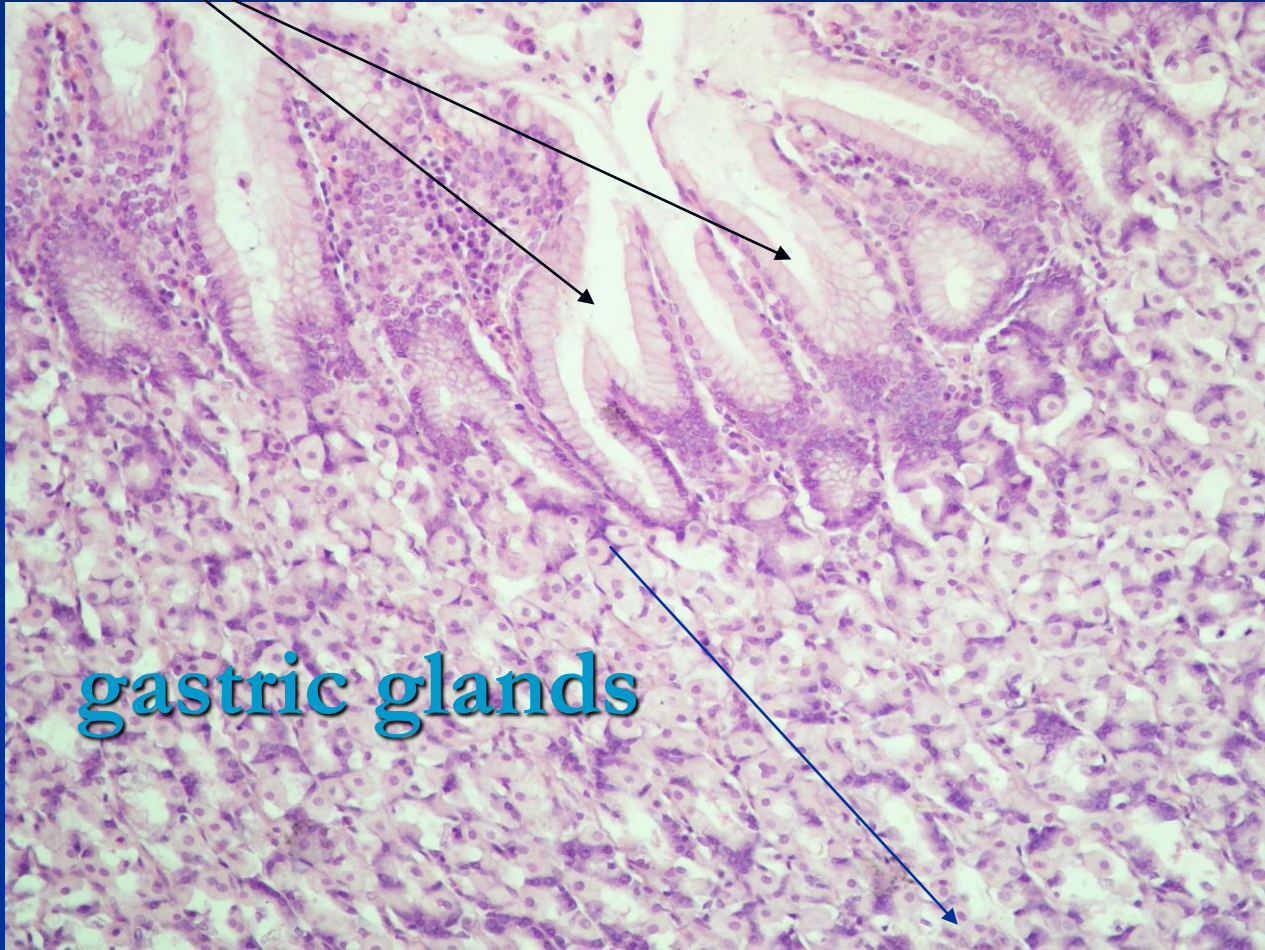


Gastric pit (simple columnar epith.)

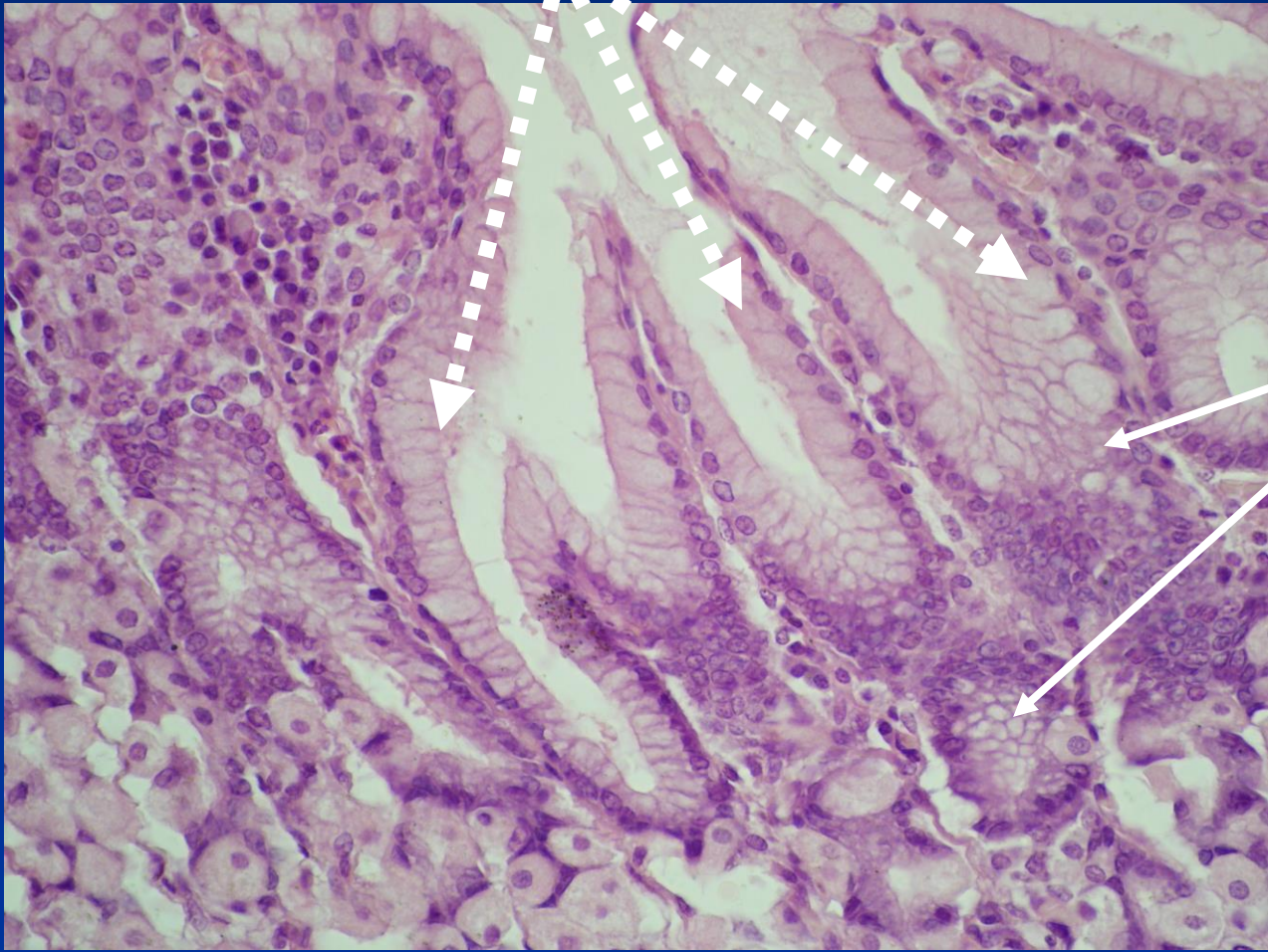
gastric glands



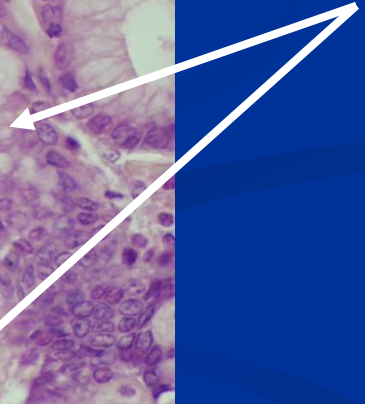
Gastric pit simple branched tubular gland



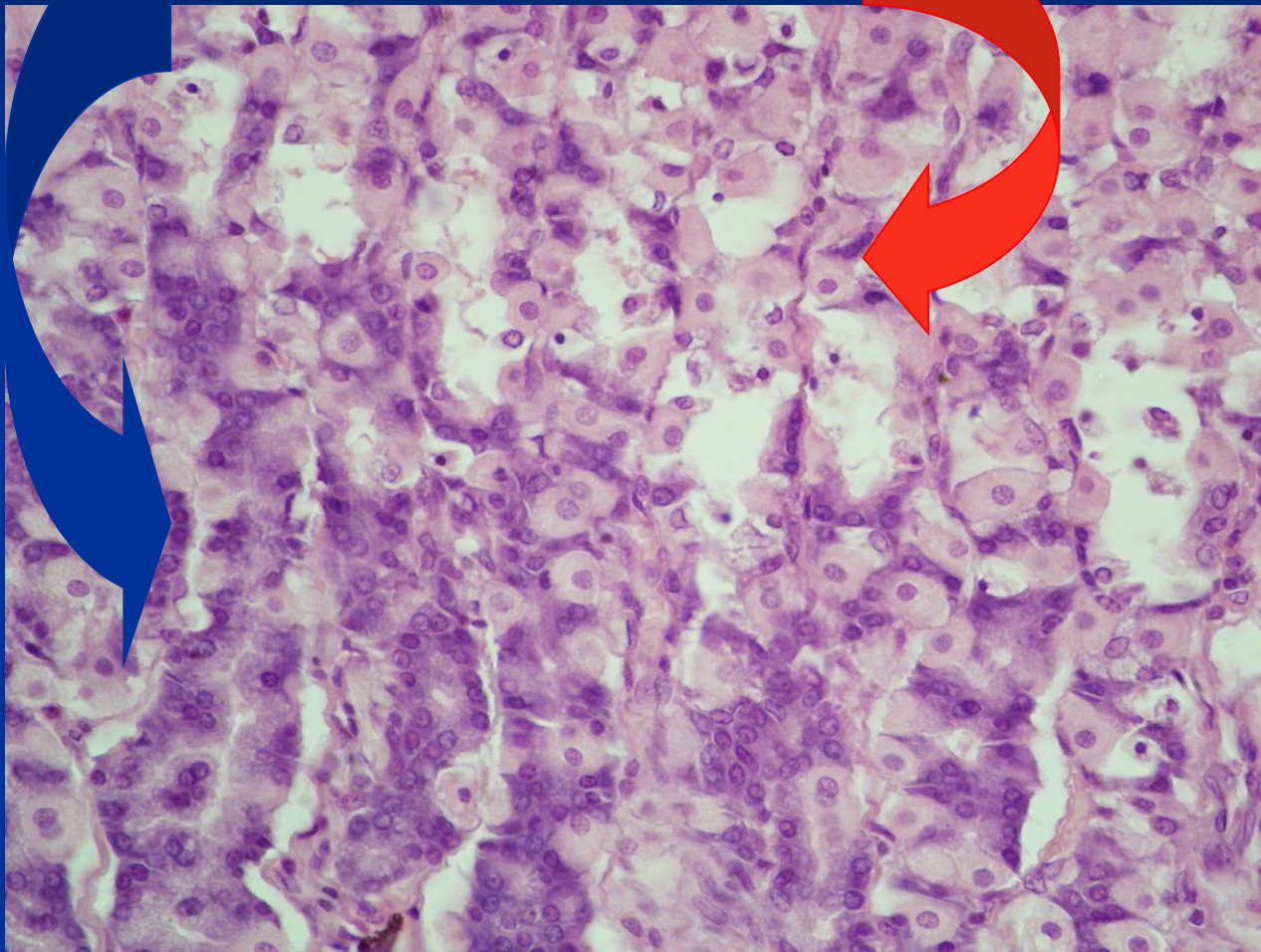
Mucous_secreting surface cells



Neck
mucous
cells

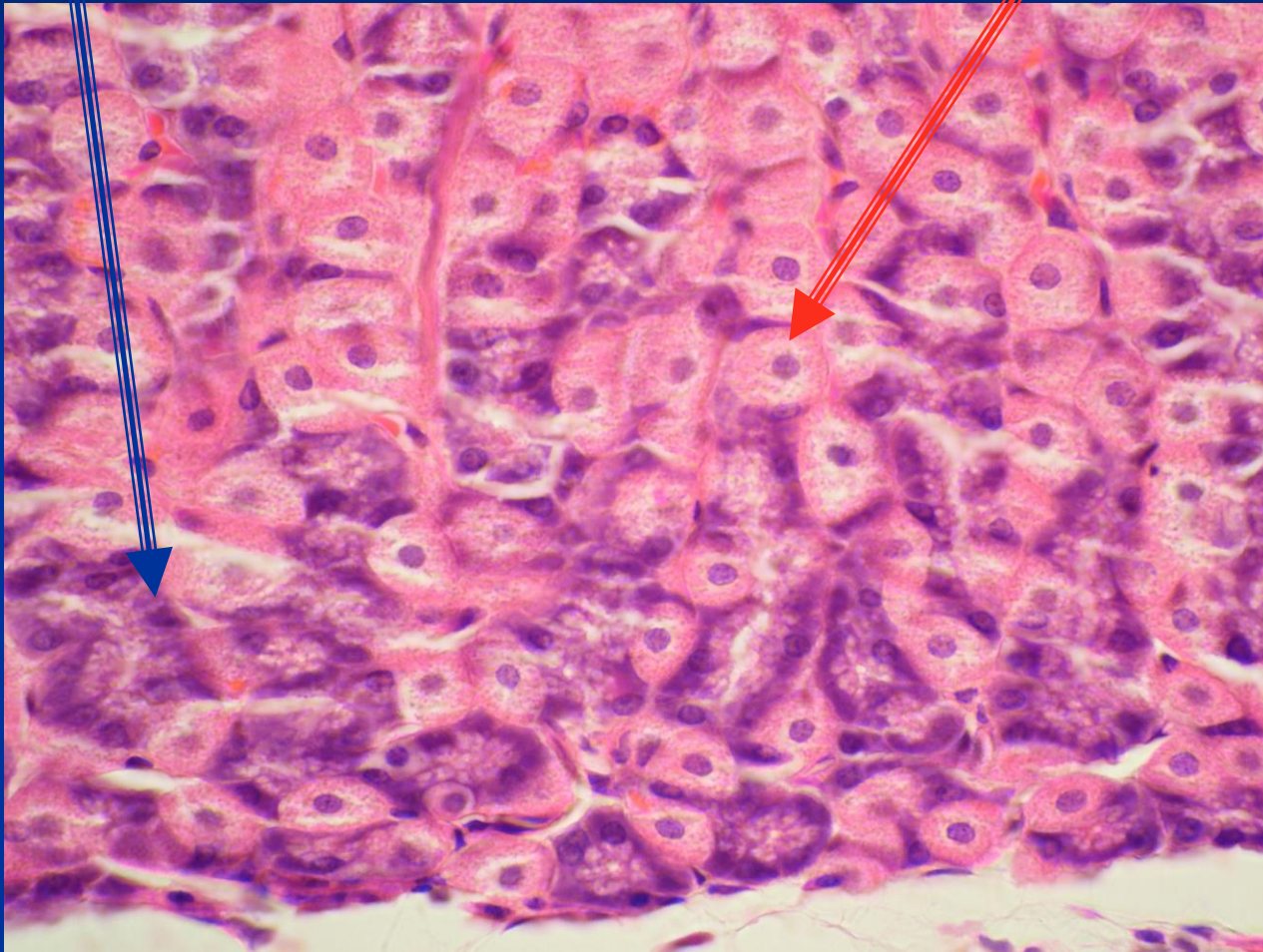


Chief cells parietal cell



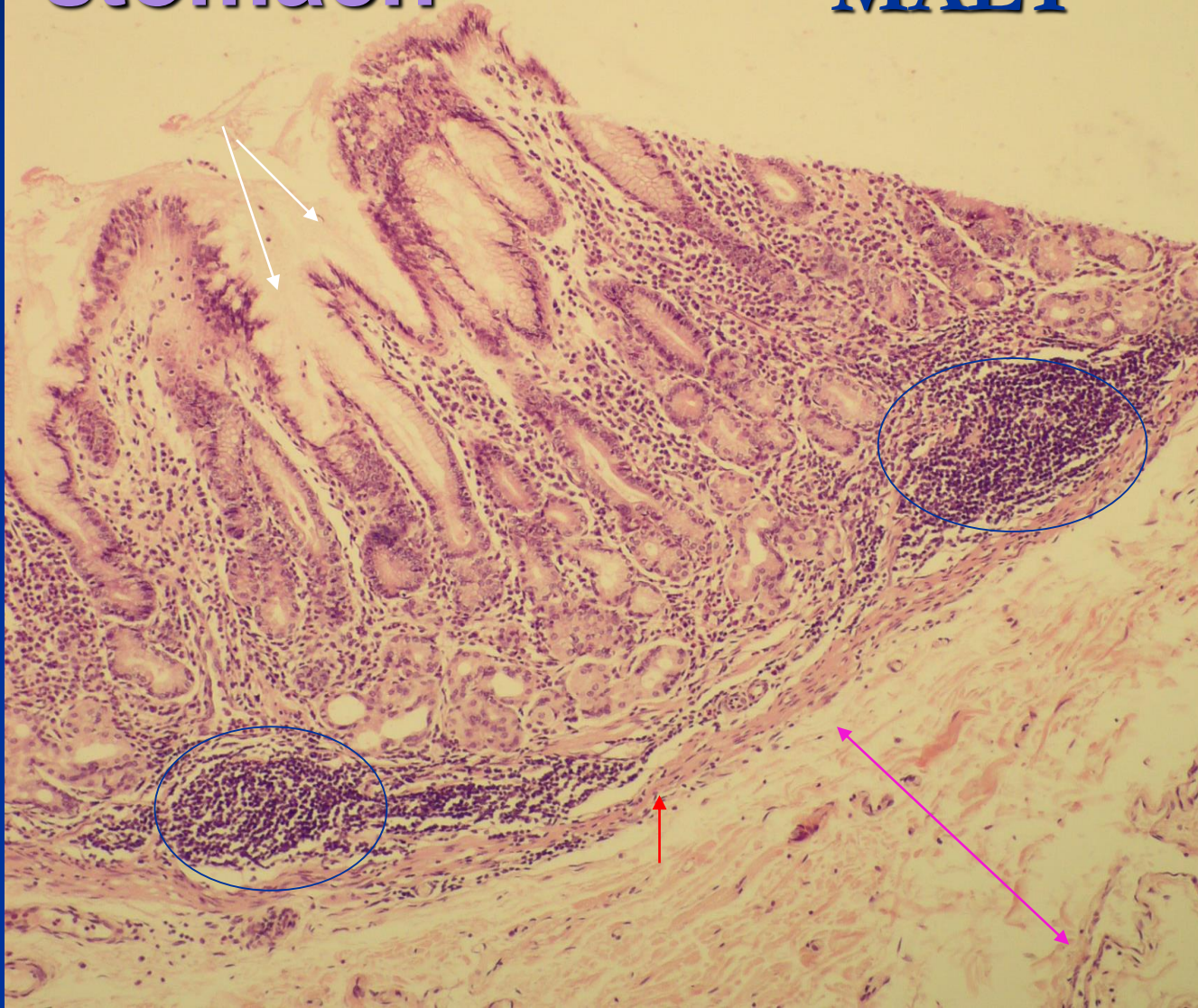
Chief cells

parietal cell

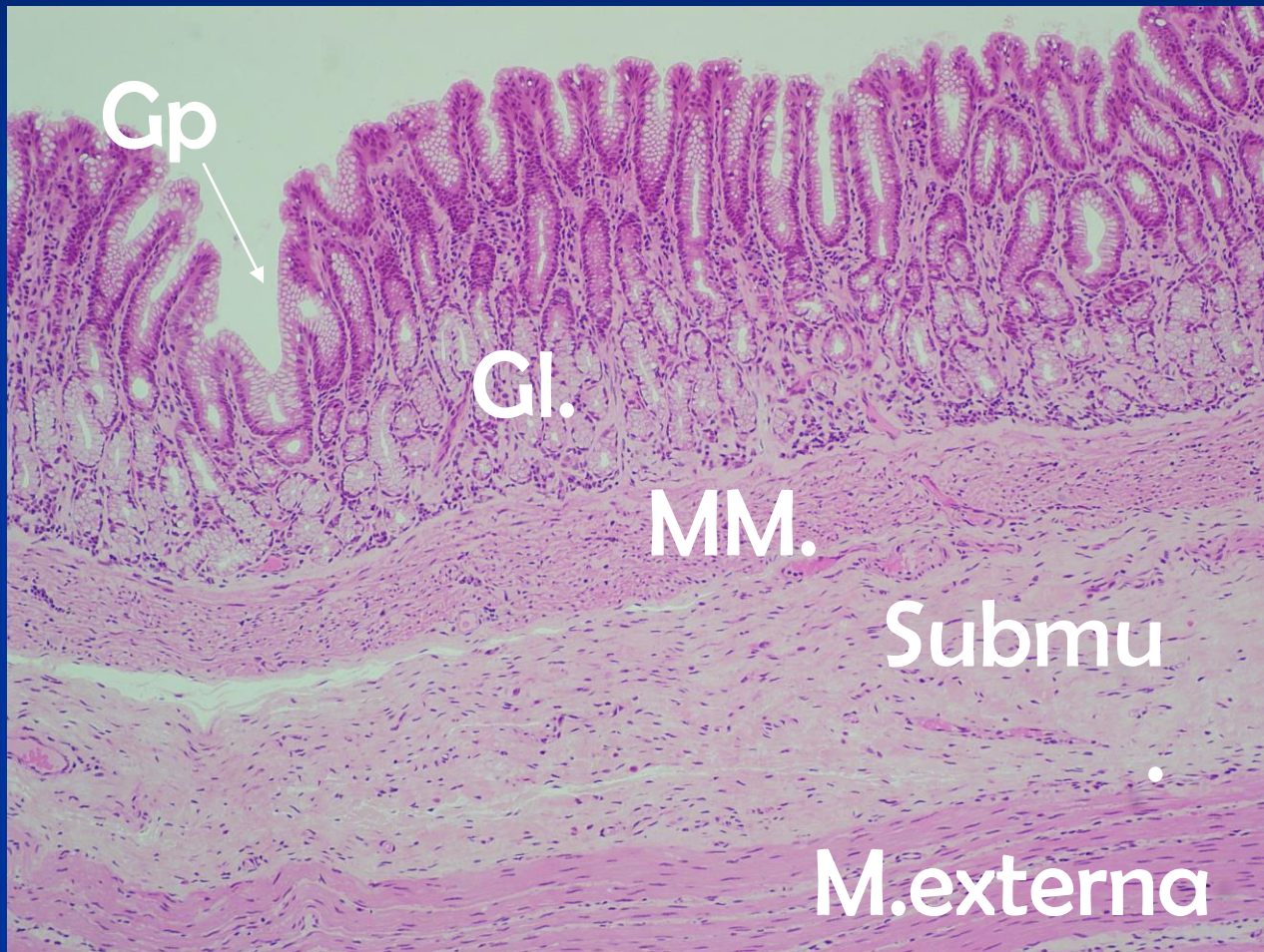


**Pyloric
stomach**

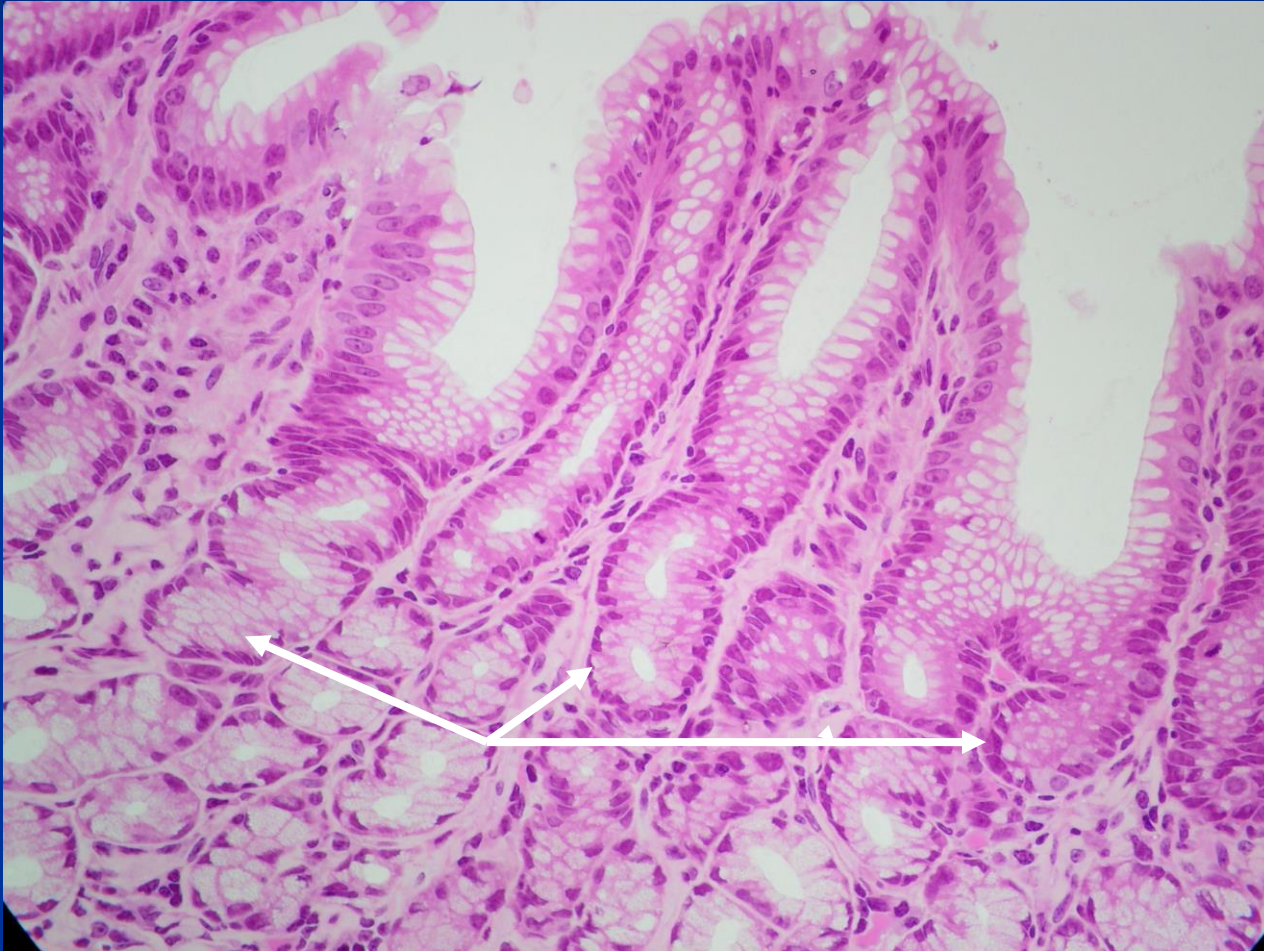
MALT



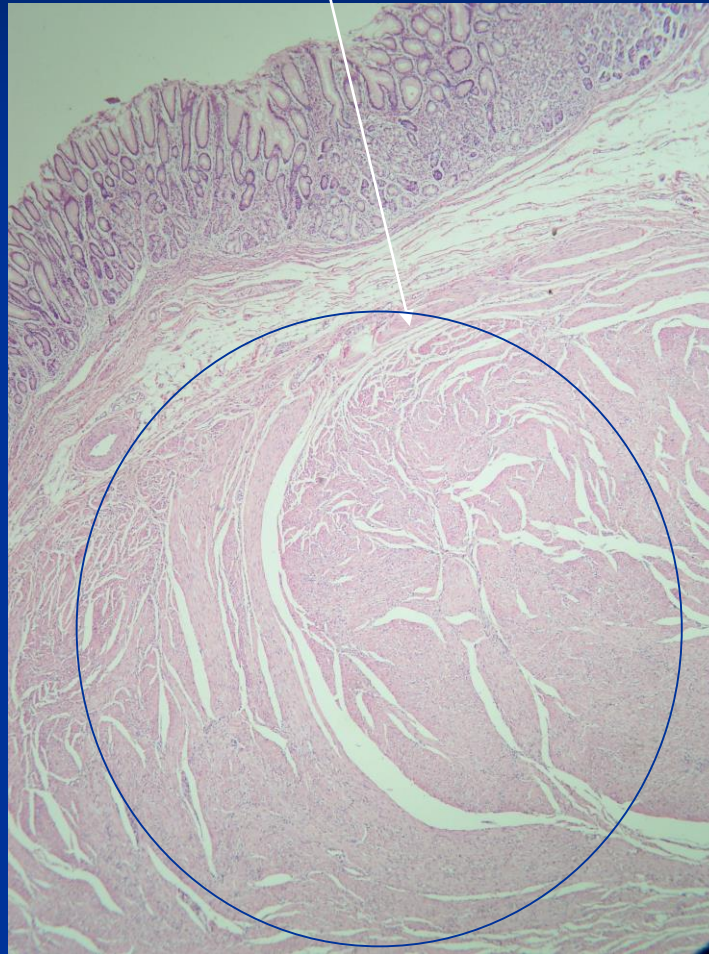
Pyloric stomach



Pyloric glands : simple branched tubular coiled glands(mucous cells)



Sphincter pyloric



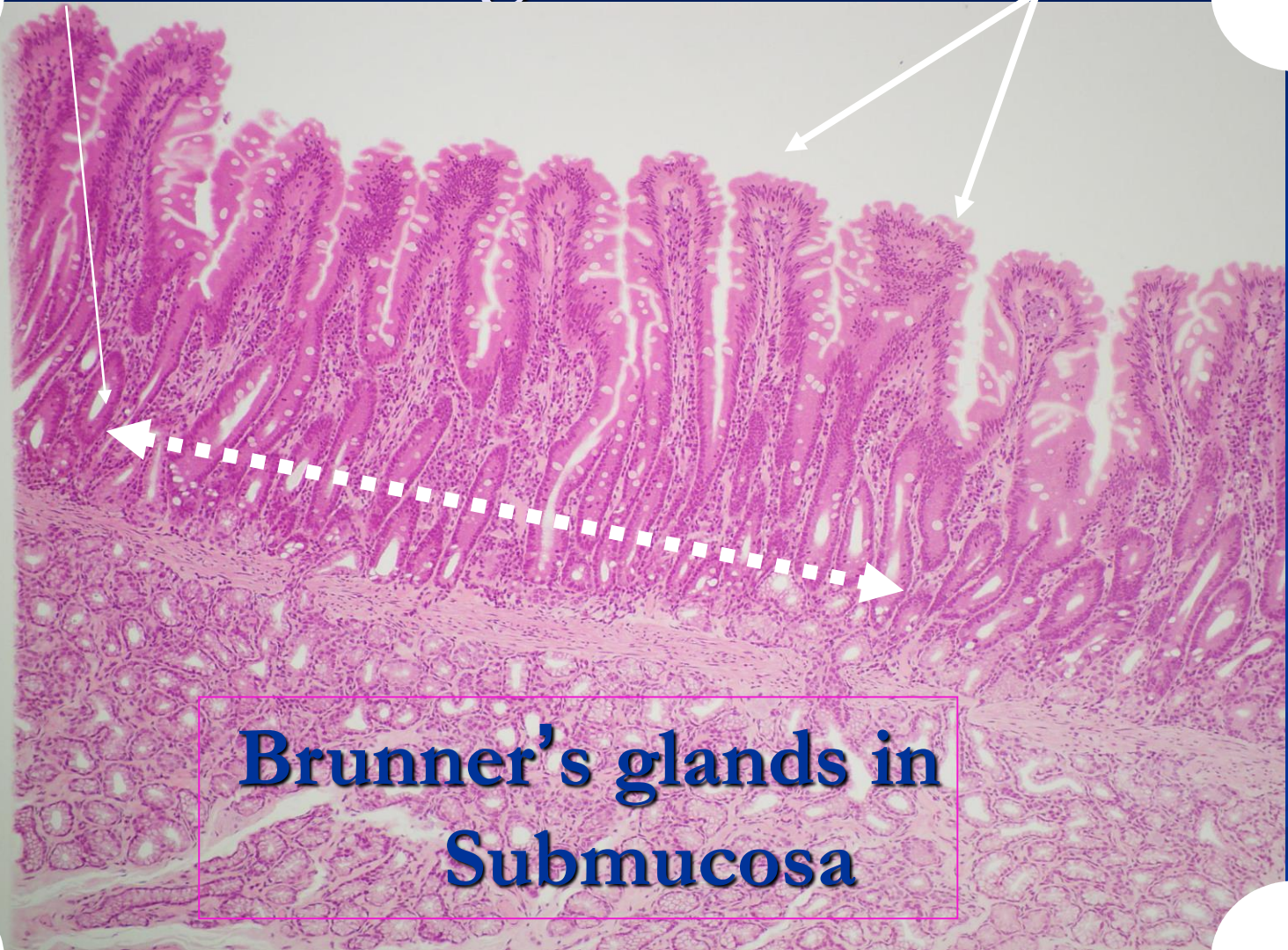
Small intestine

Duodenum



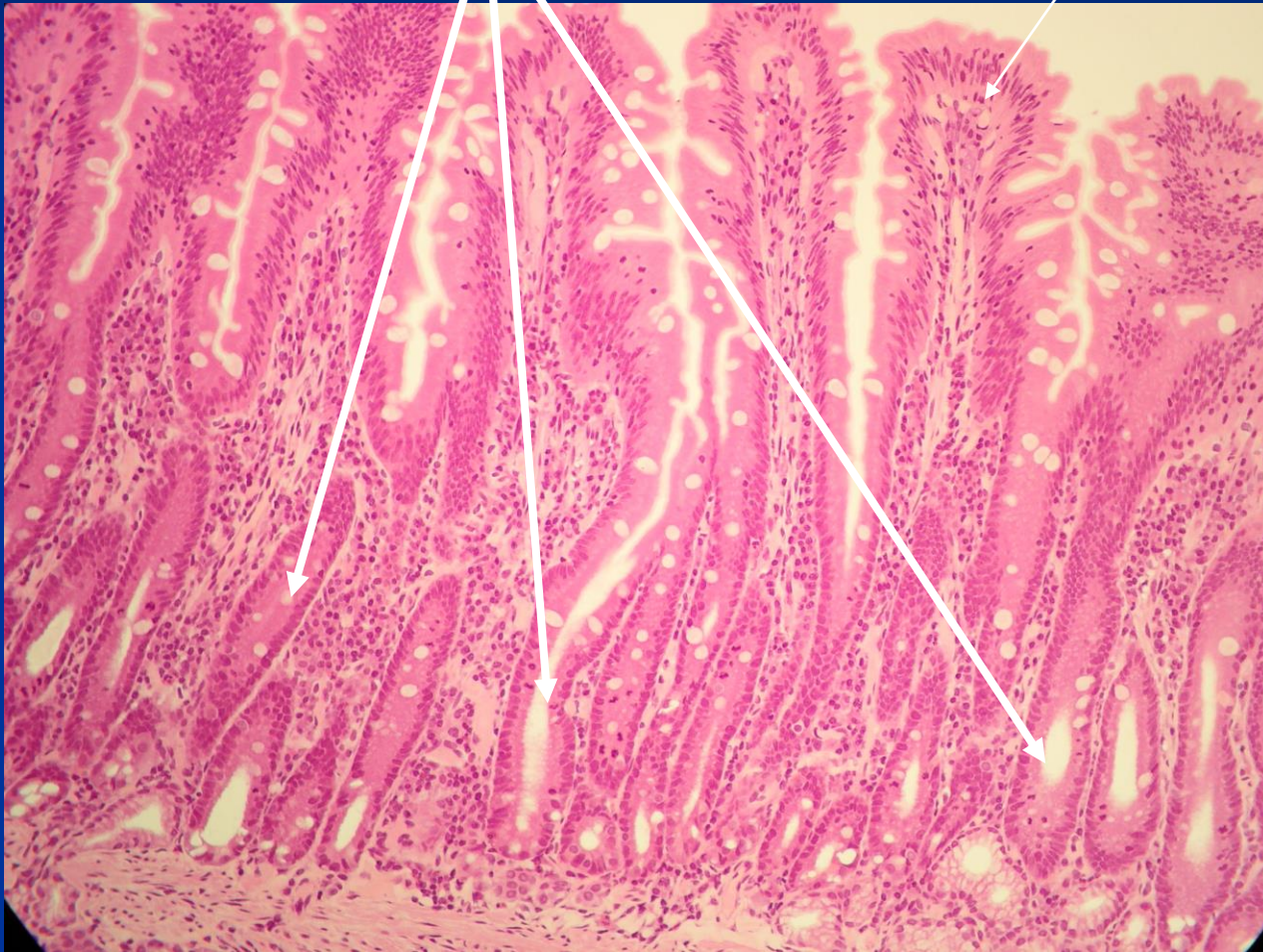
Intestinal glands

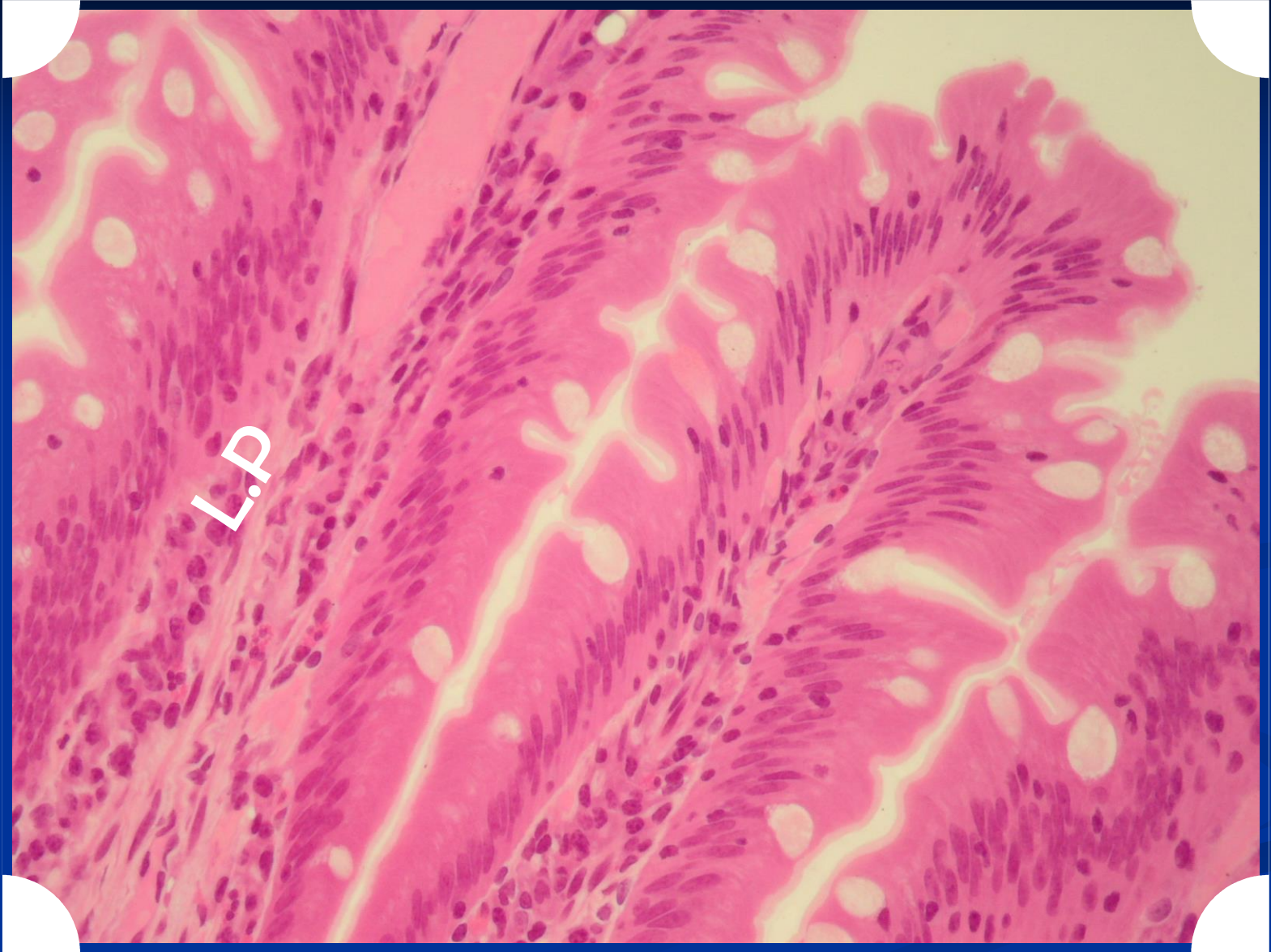
villi



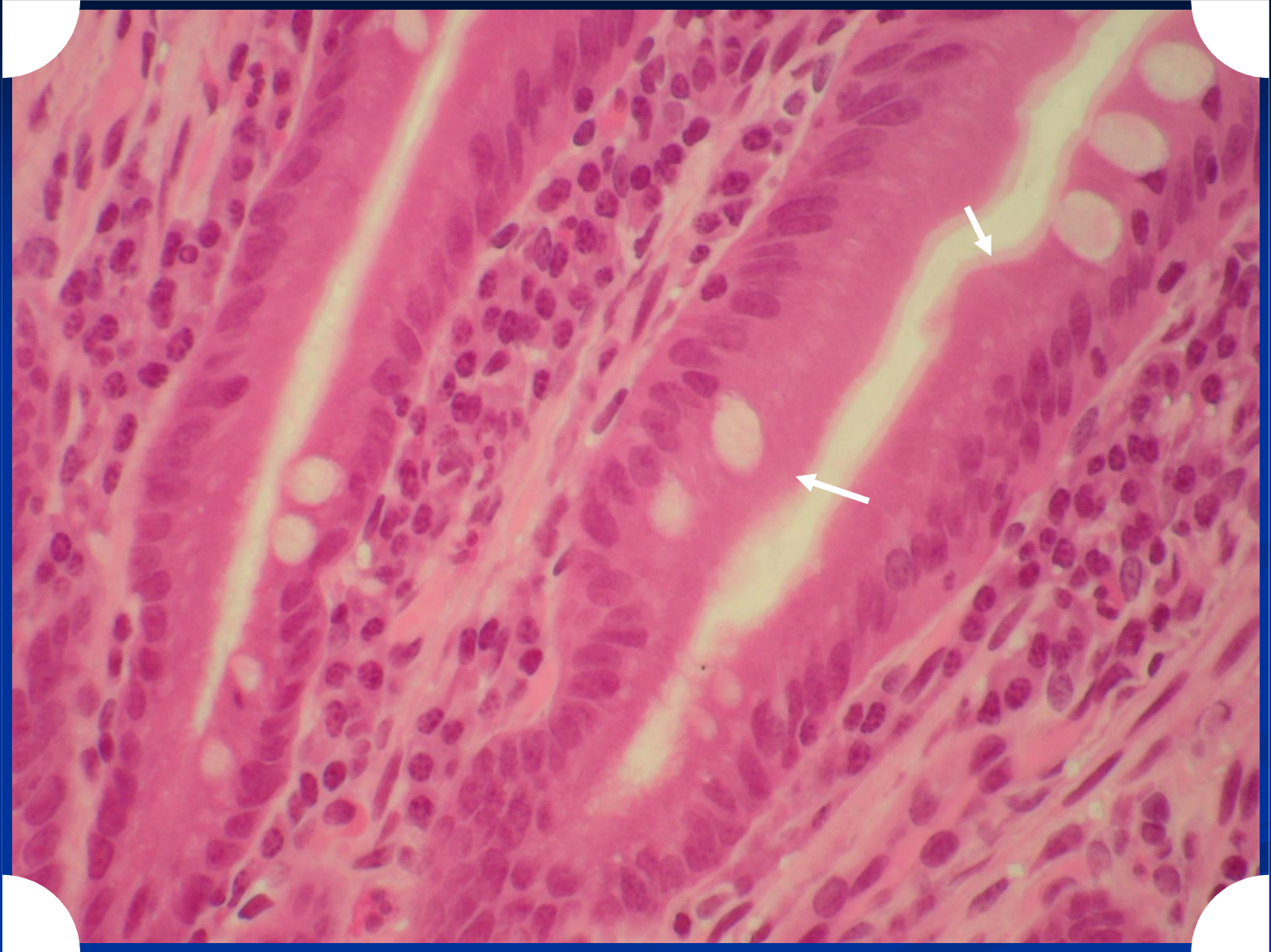
**Brunner's glands in
Submucosa**

Crypt of Lieberkuhn villus



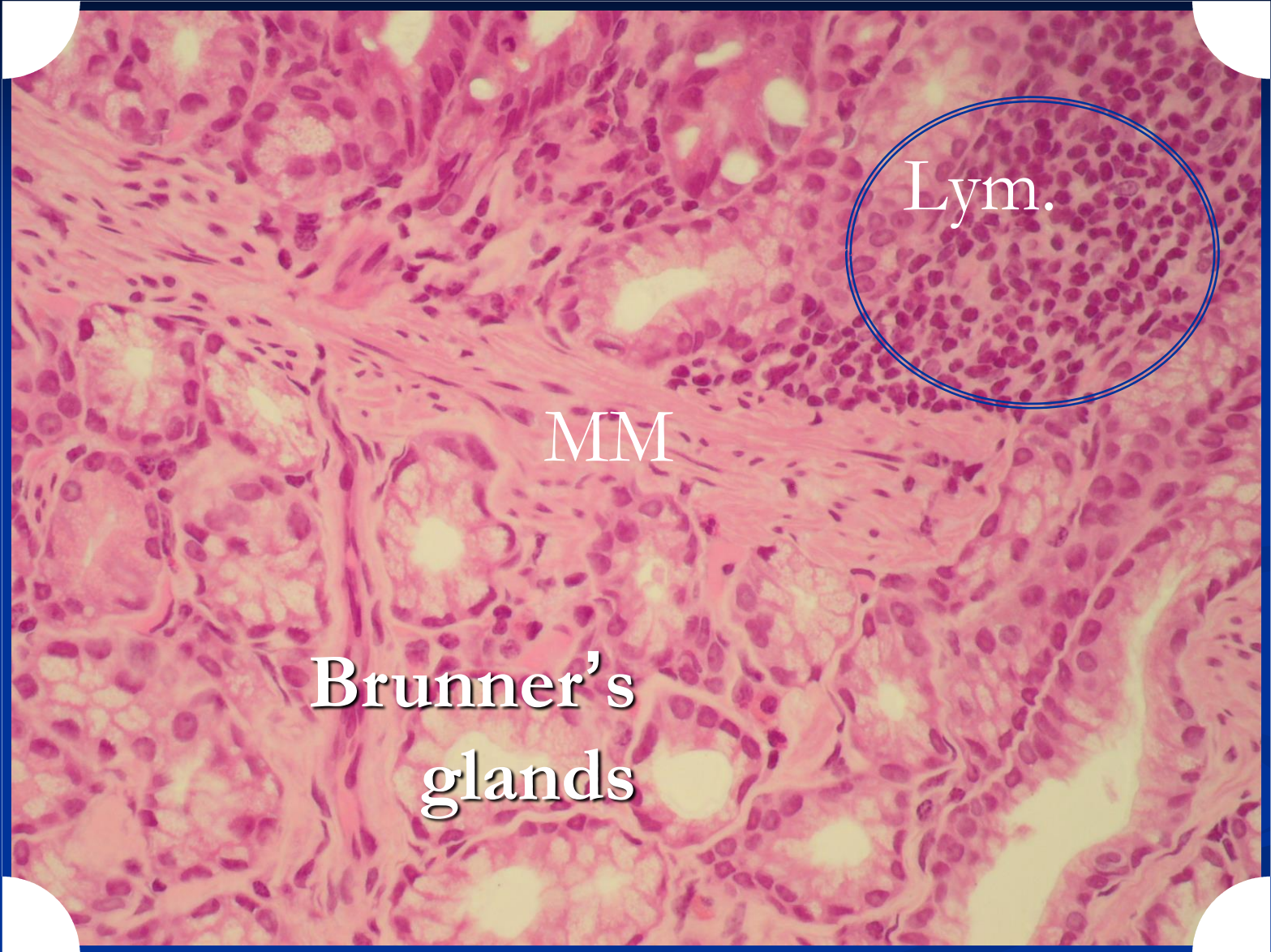


L.P



Surface absorbtive cells(simple columnar with brush border)



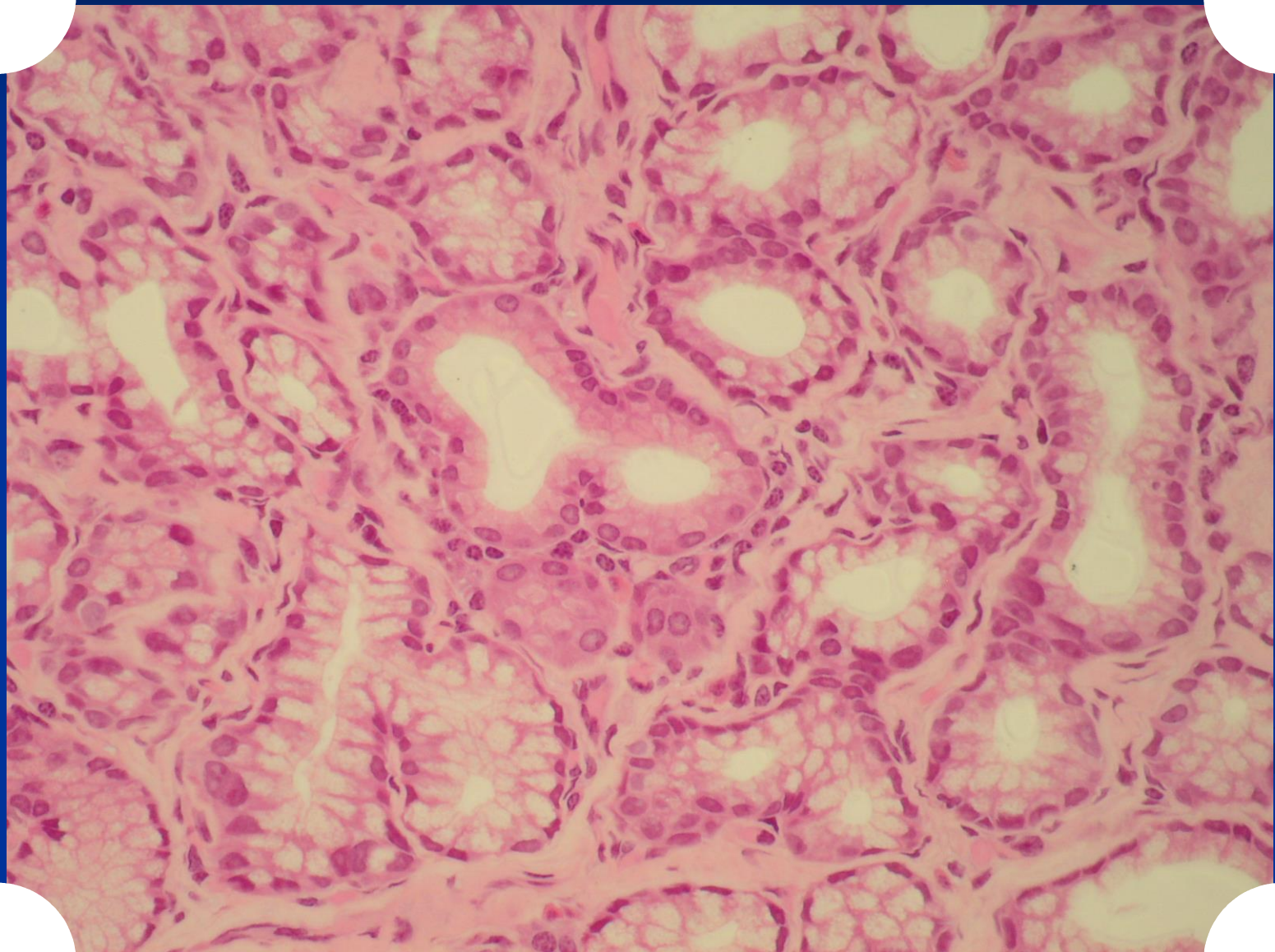


Lym.

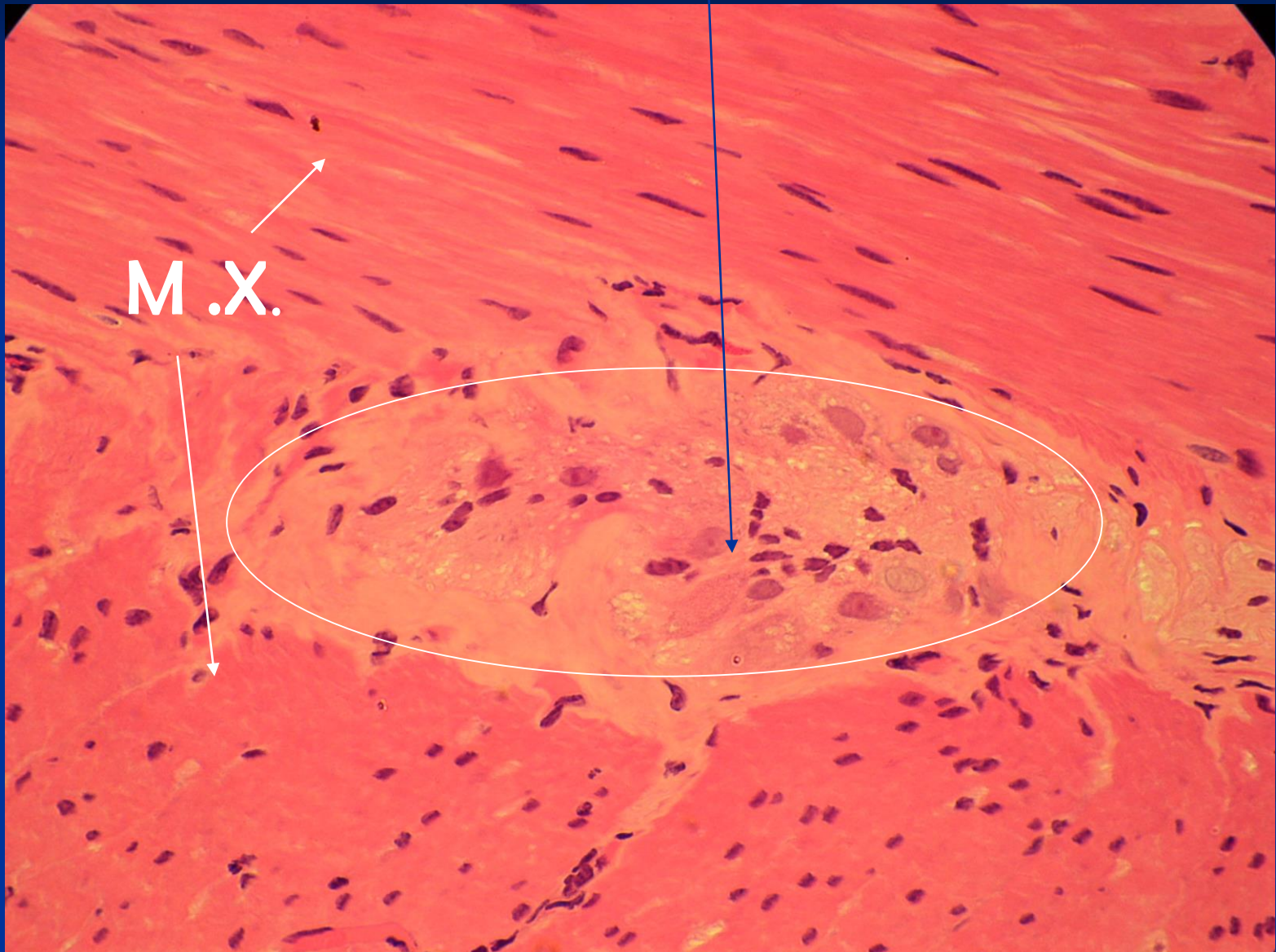
MM

Brunner's
glands

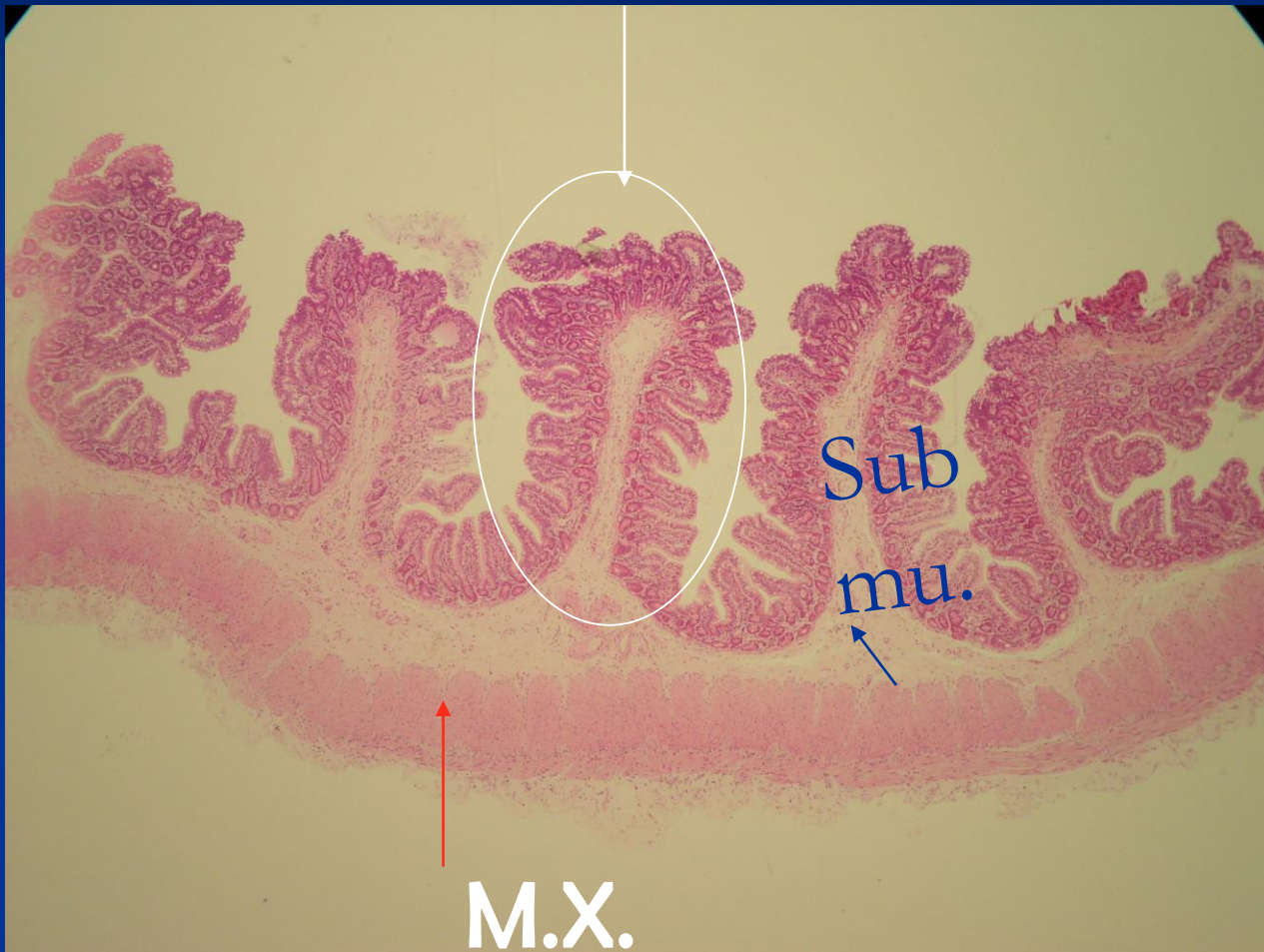
Simple branch tubular gl.=mucous



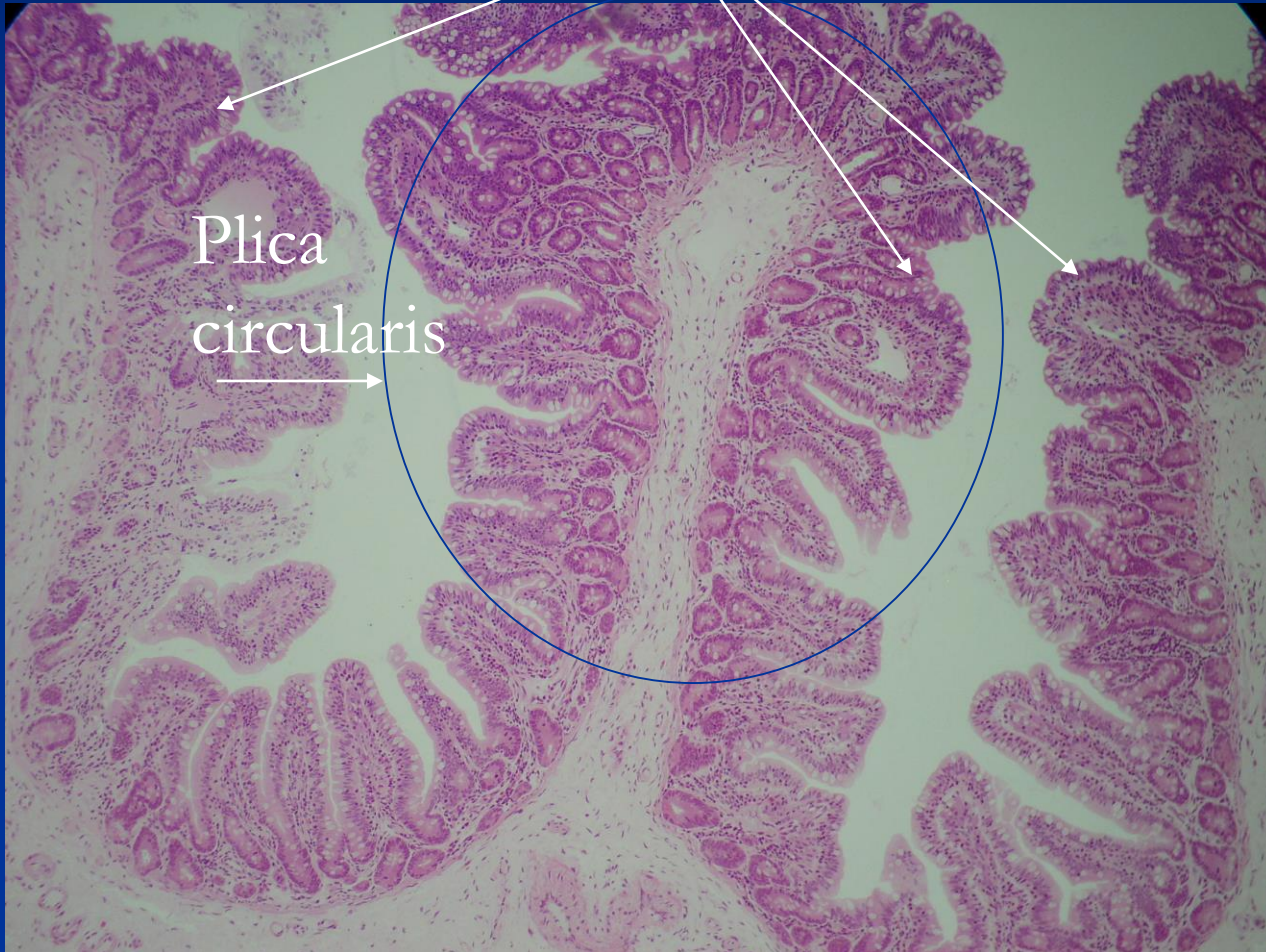
Auerbach's myenteric plexus in duodenum



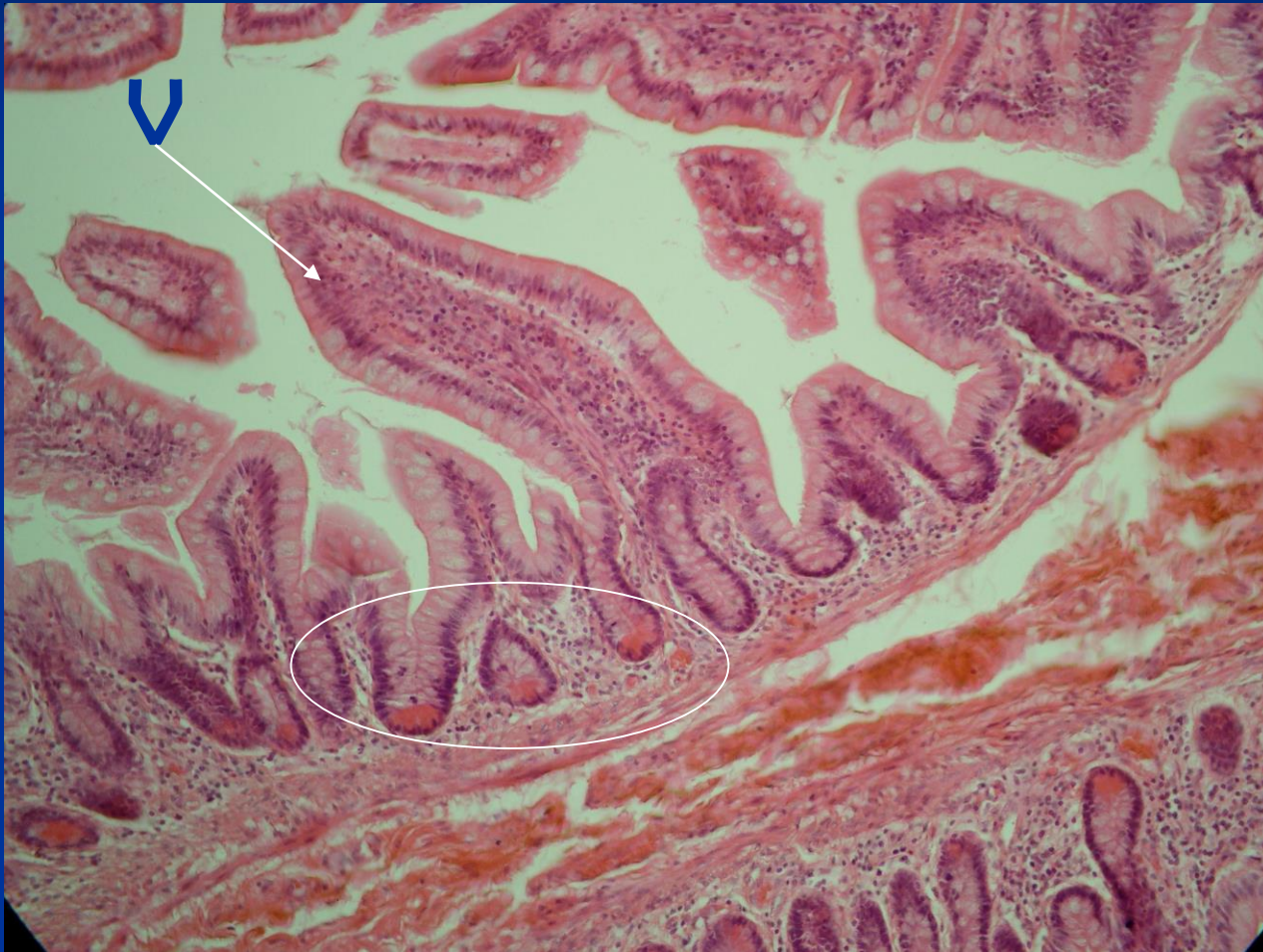
Plicae circularis in jejunum



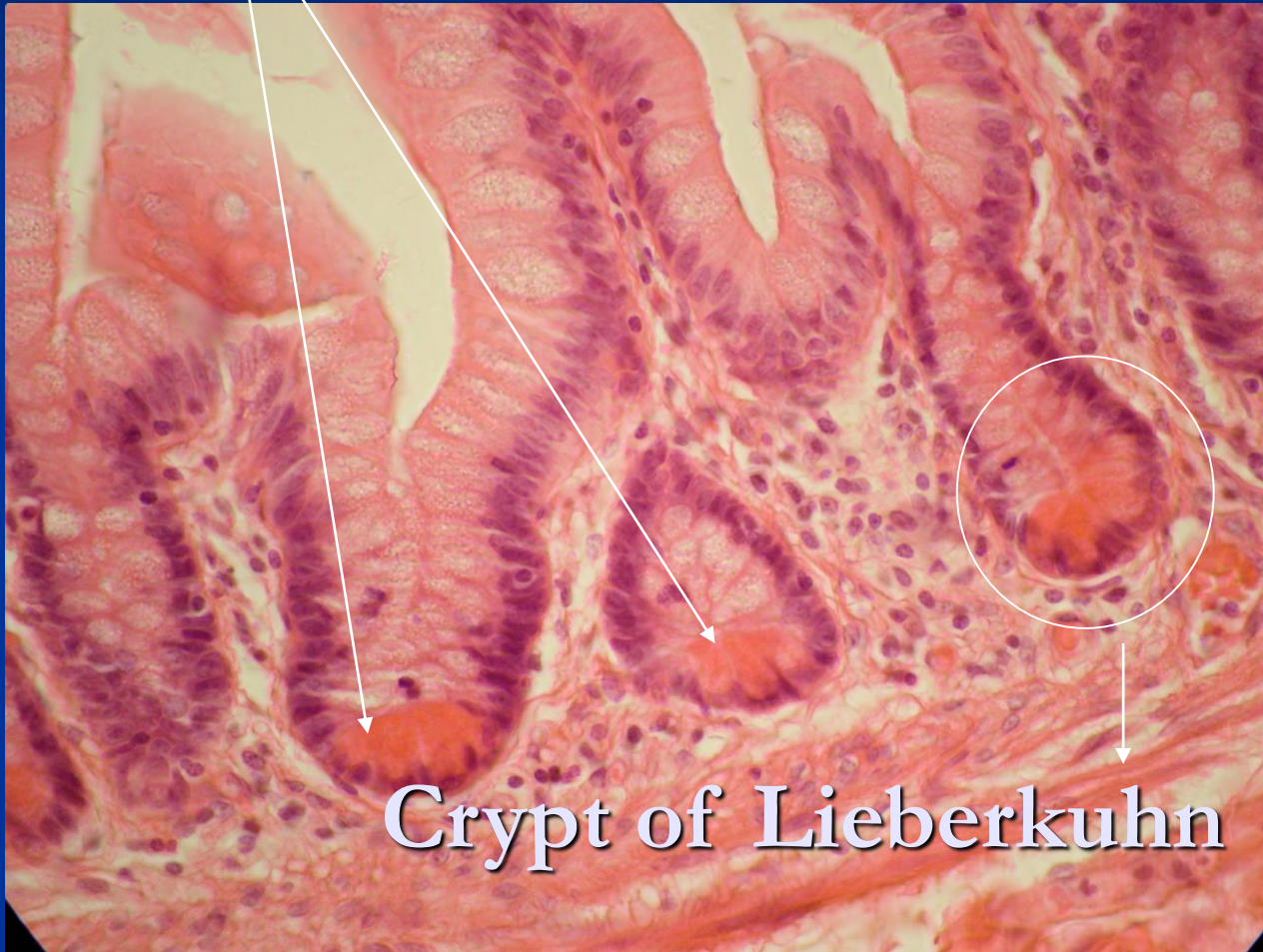
villi



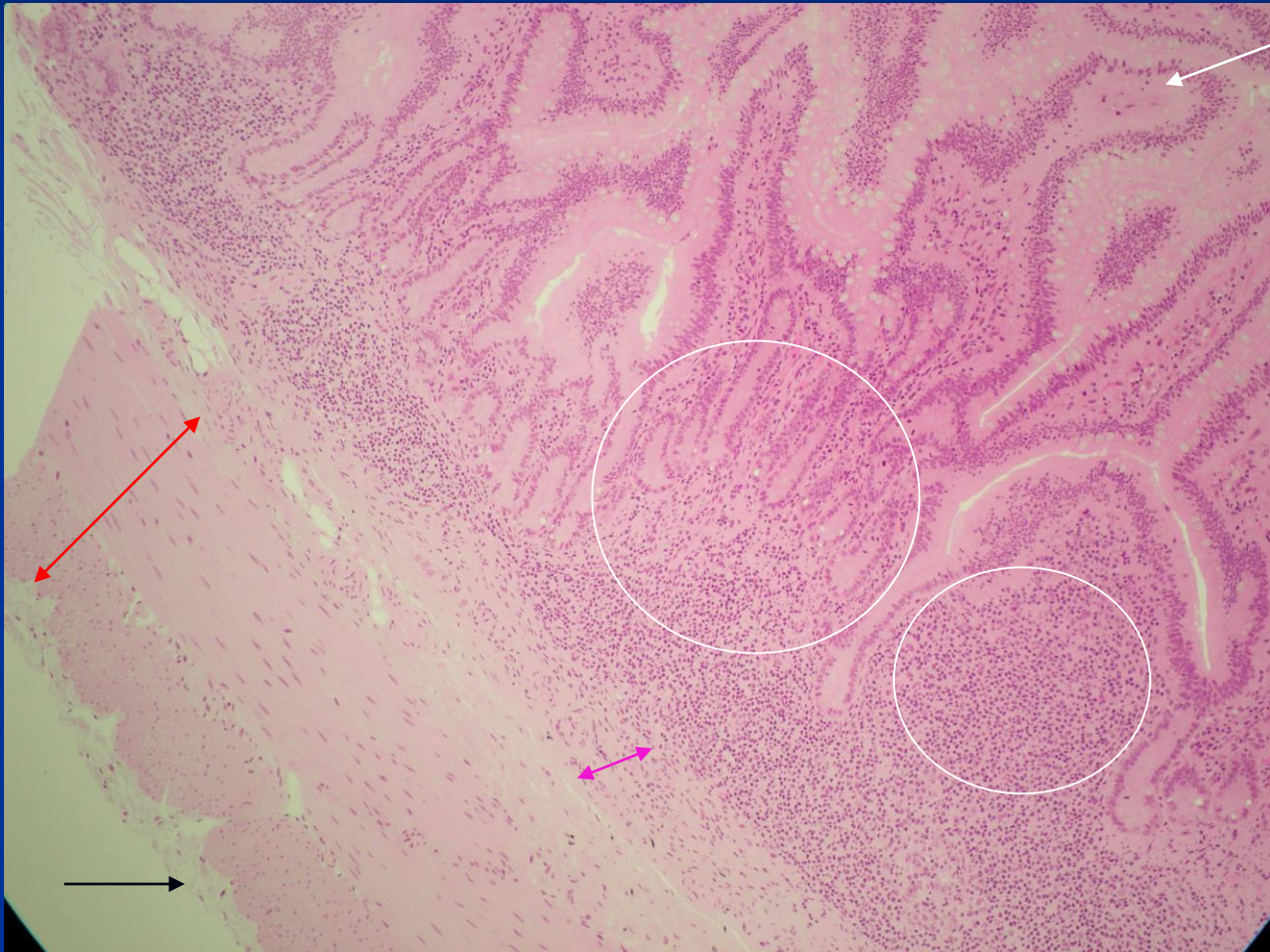
Crypt= intestinal gland



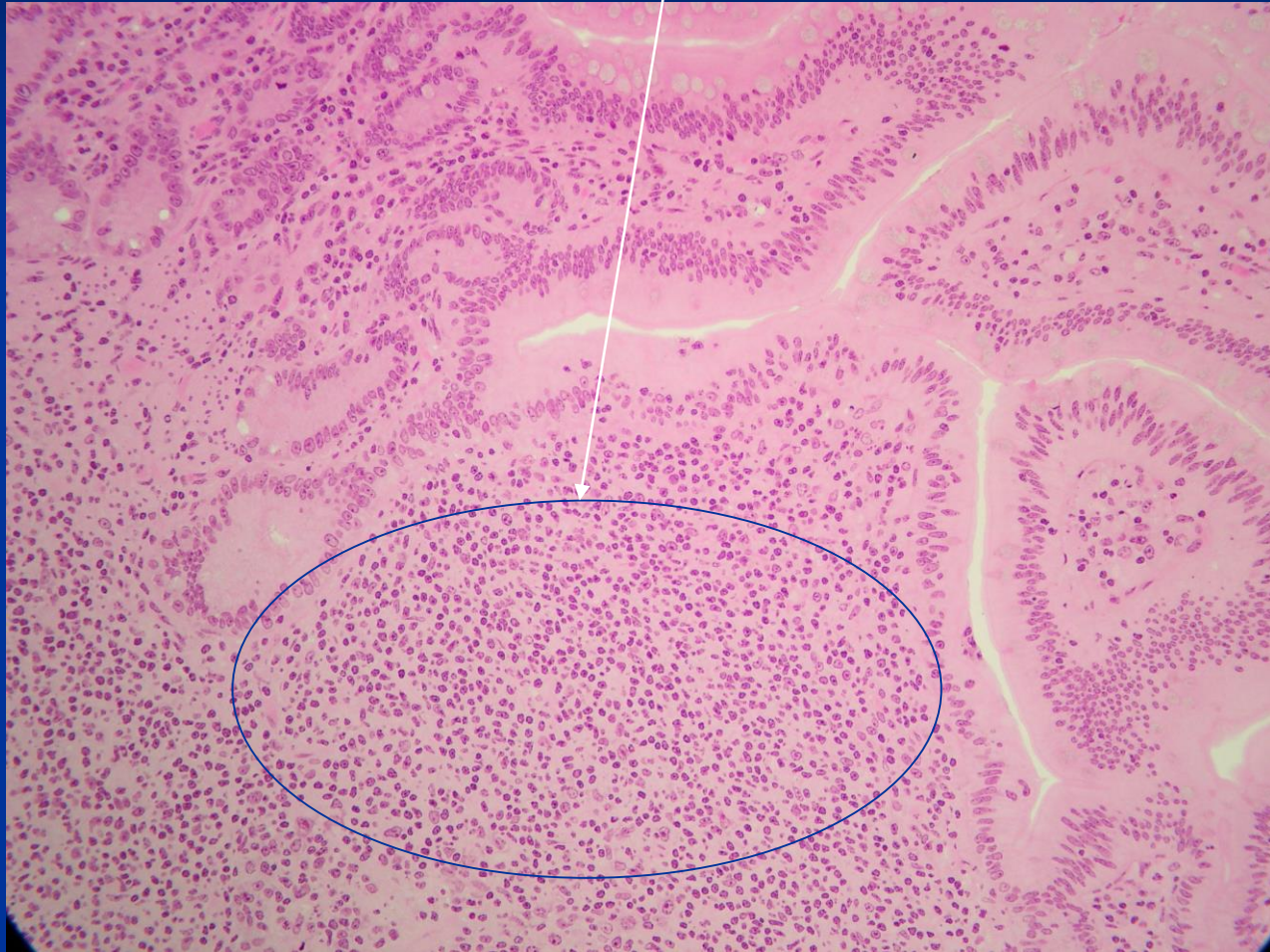
Paneth cell of intestinal gland



Ileum

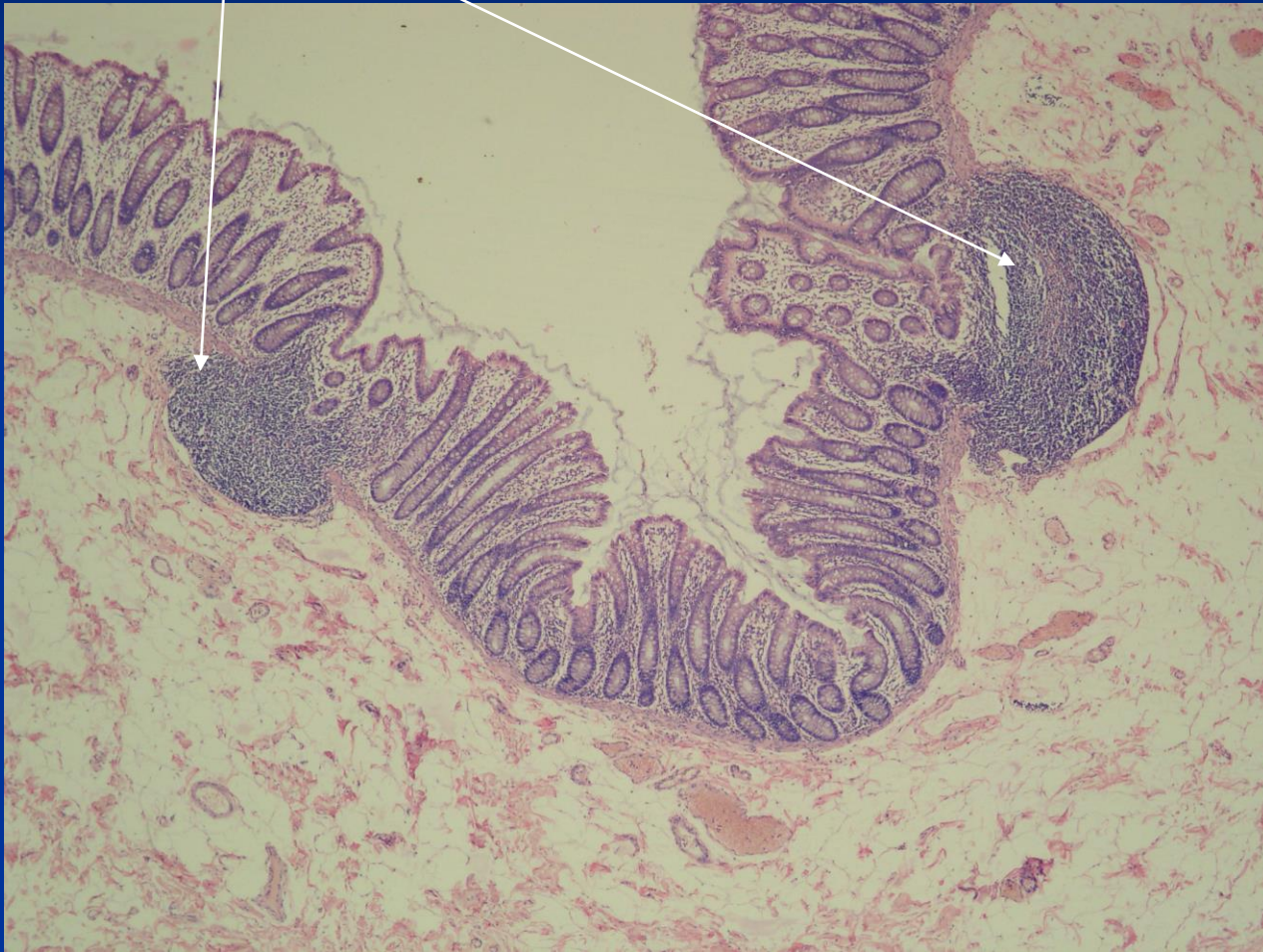


Peyer's patches



Large intestine

solitary nodule in colon

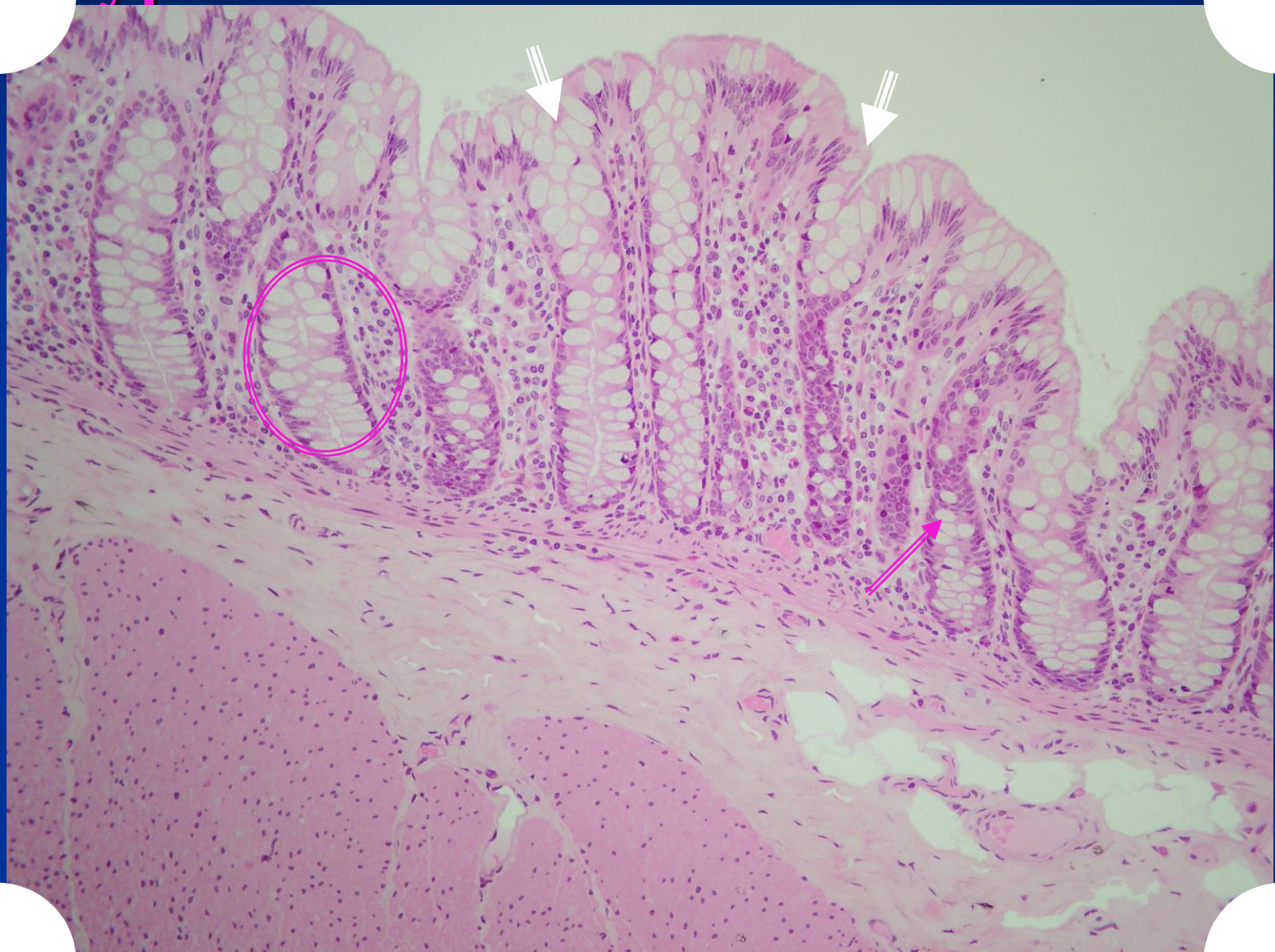


colon



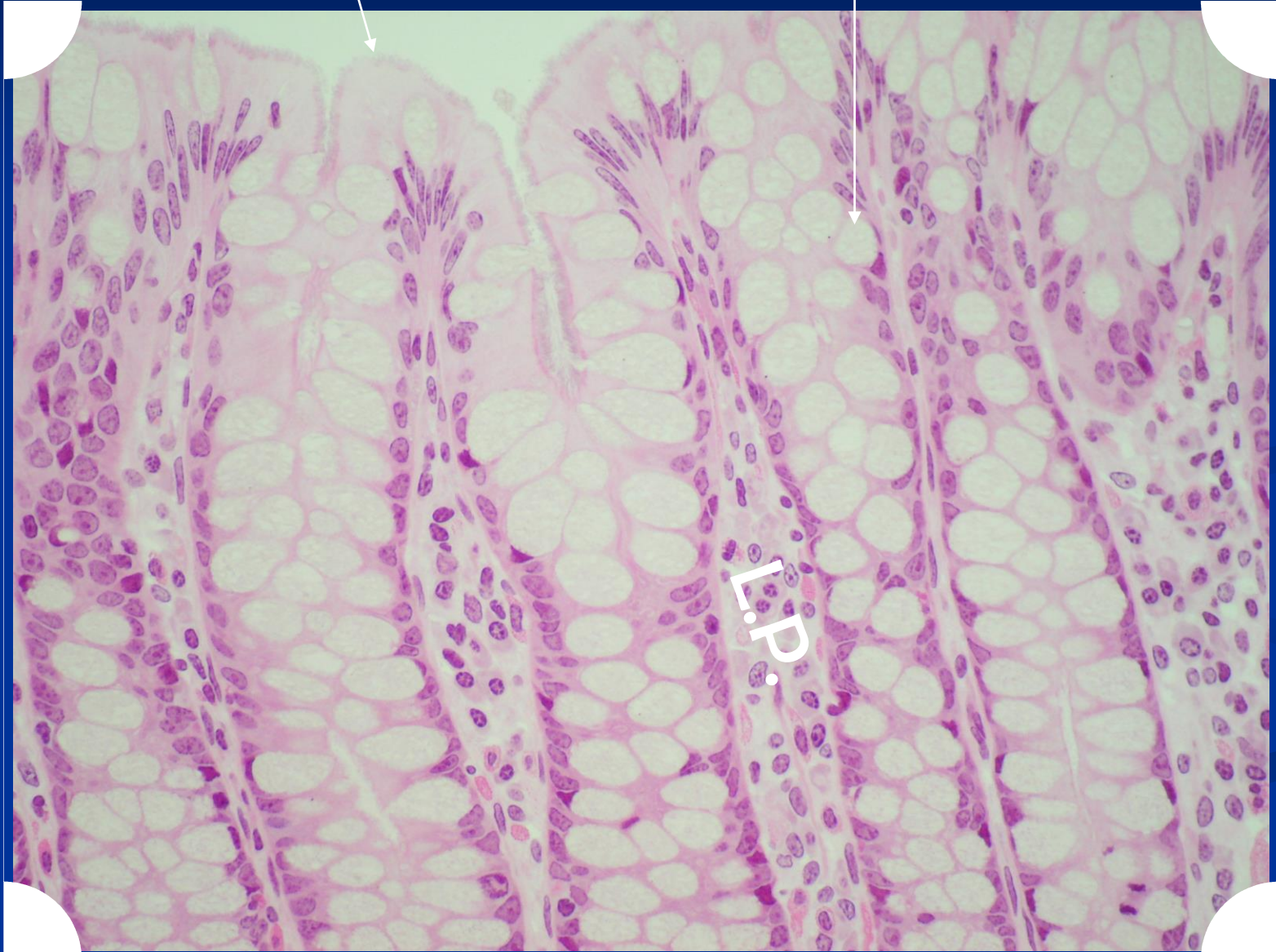
Simple tubular gland in colon

Crypt of Lieberkuhn=

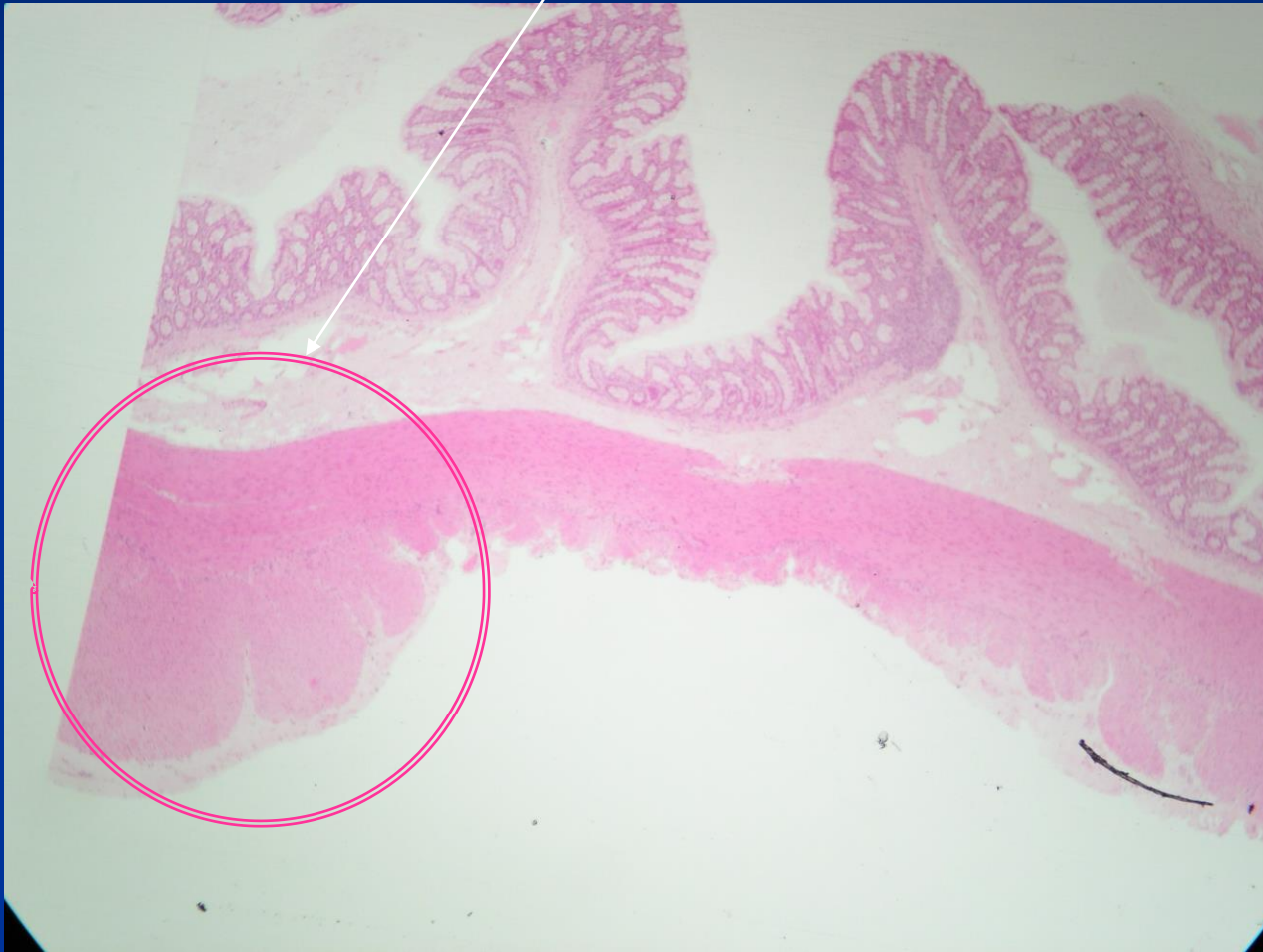


surface cell

Goblet cells



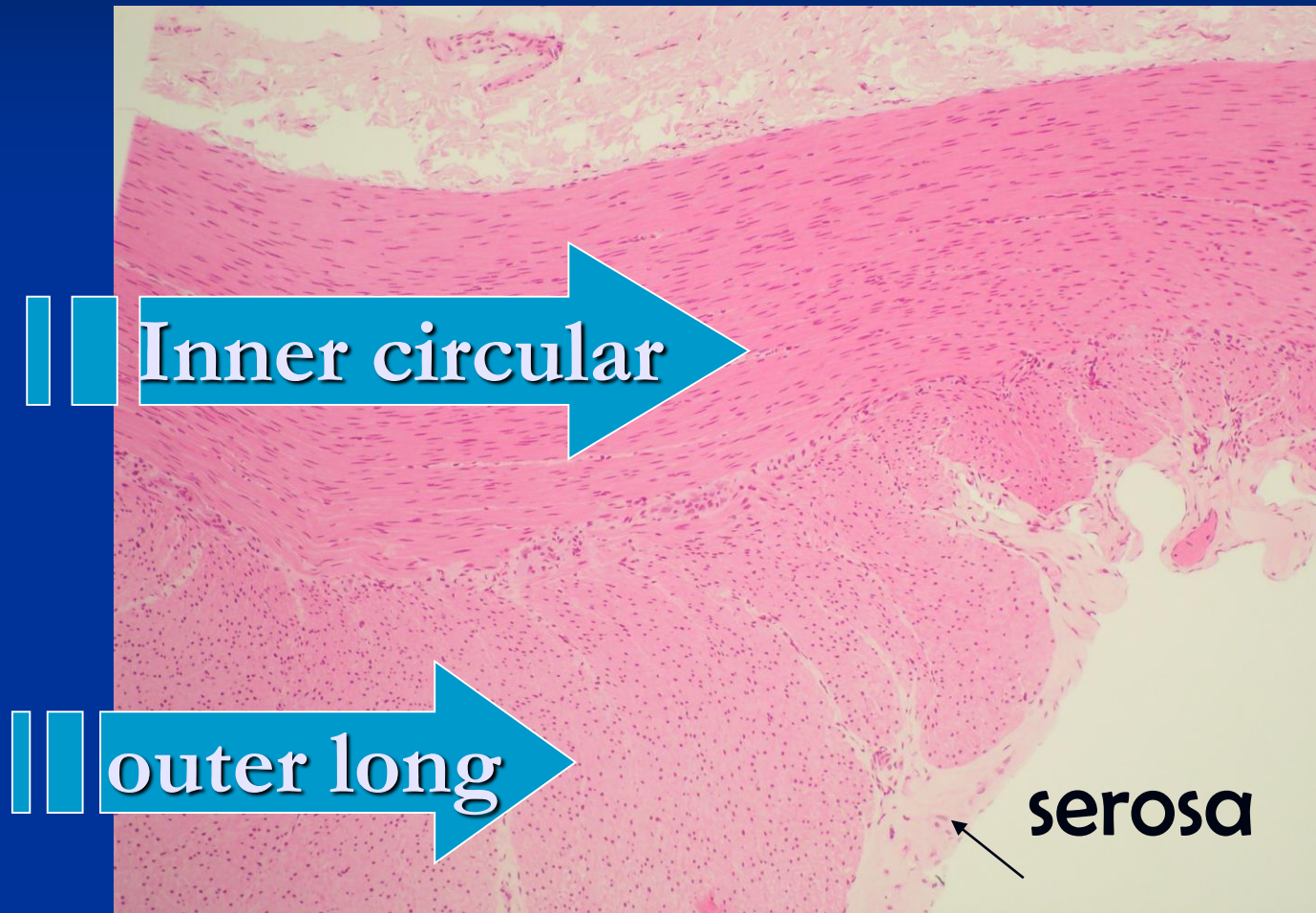
Taeniae coli



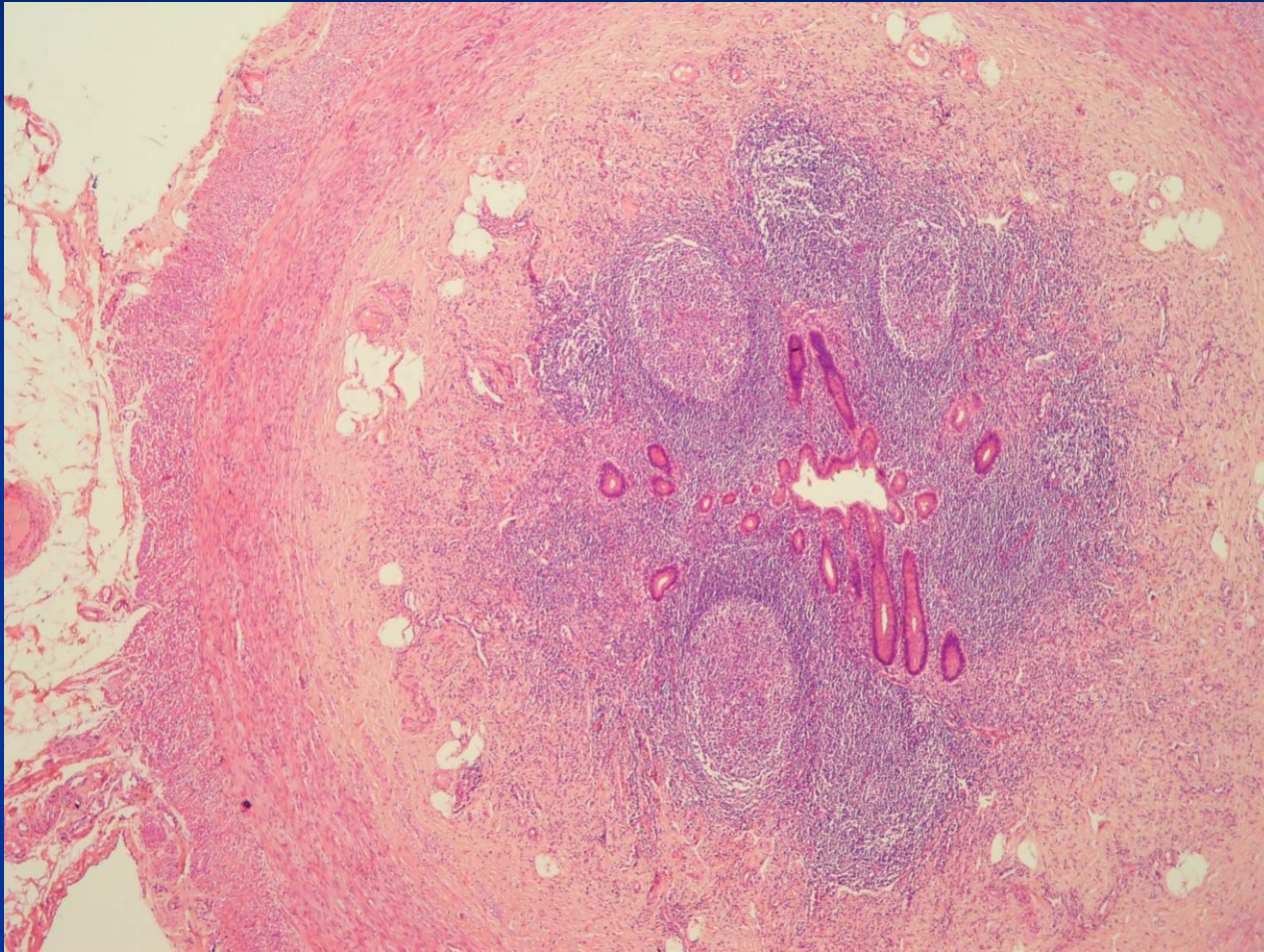
Inner circular

outer long

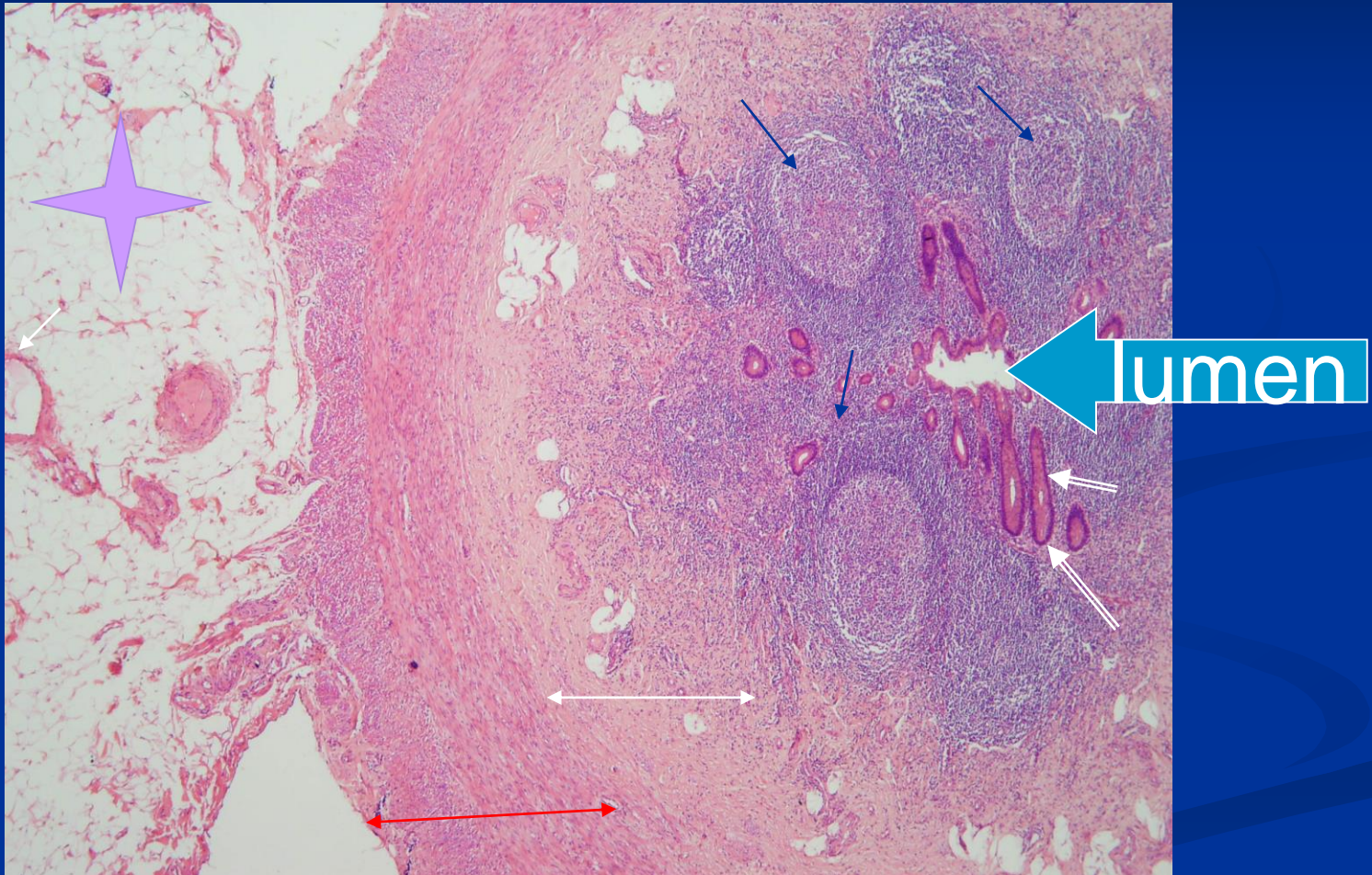
smooth muscle.



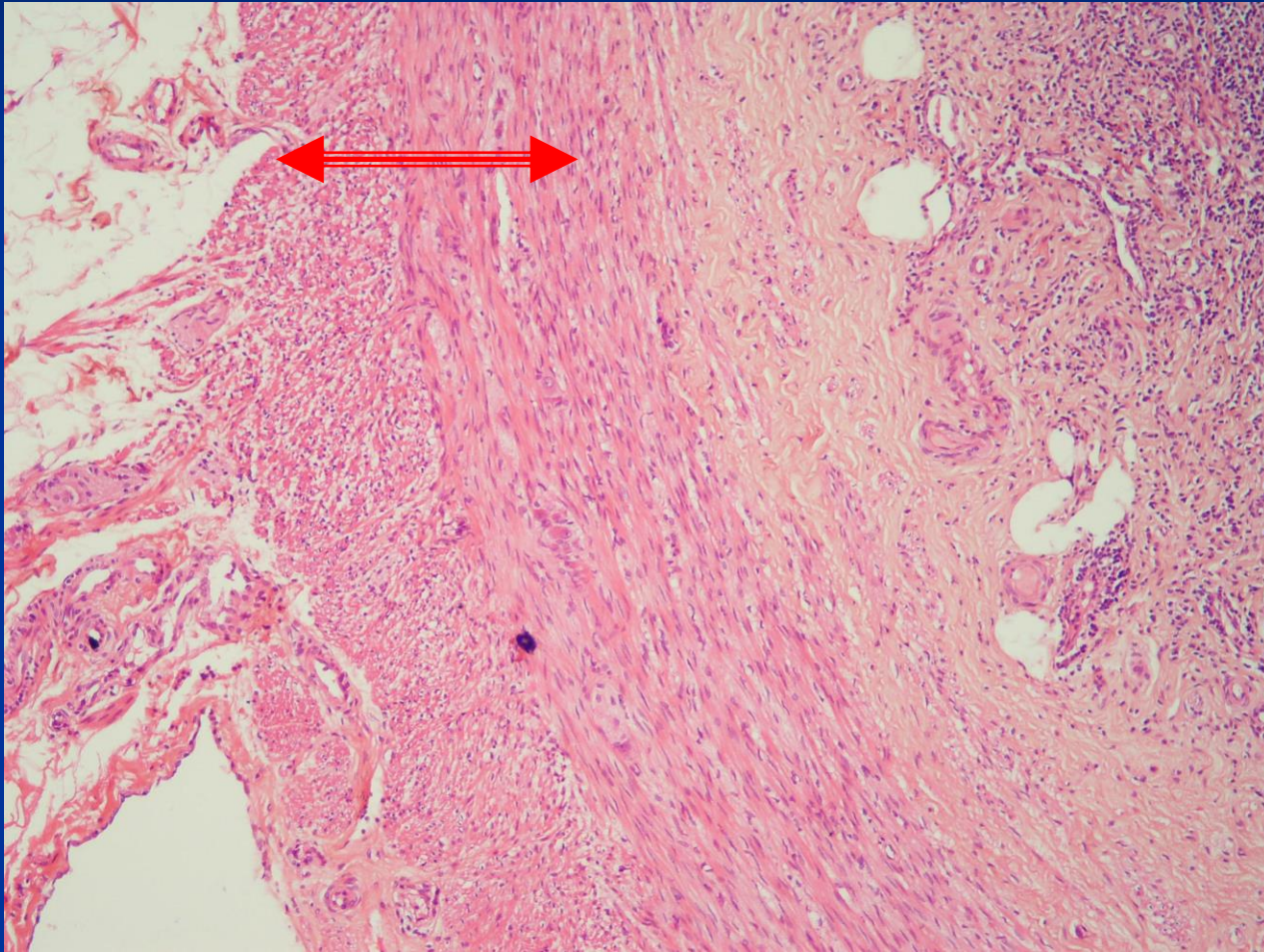
Appendix



★ Mesoappendix lymph. Nodu. Crypt of Lieberkuhn

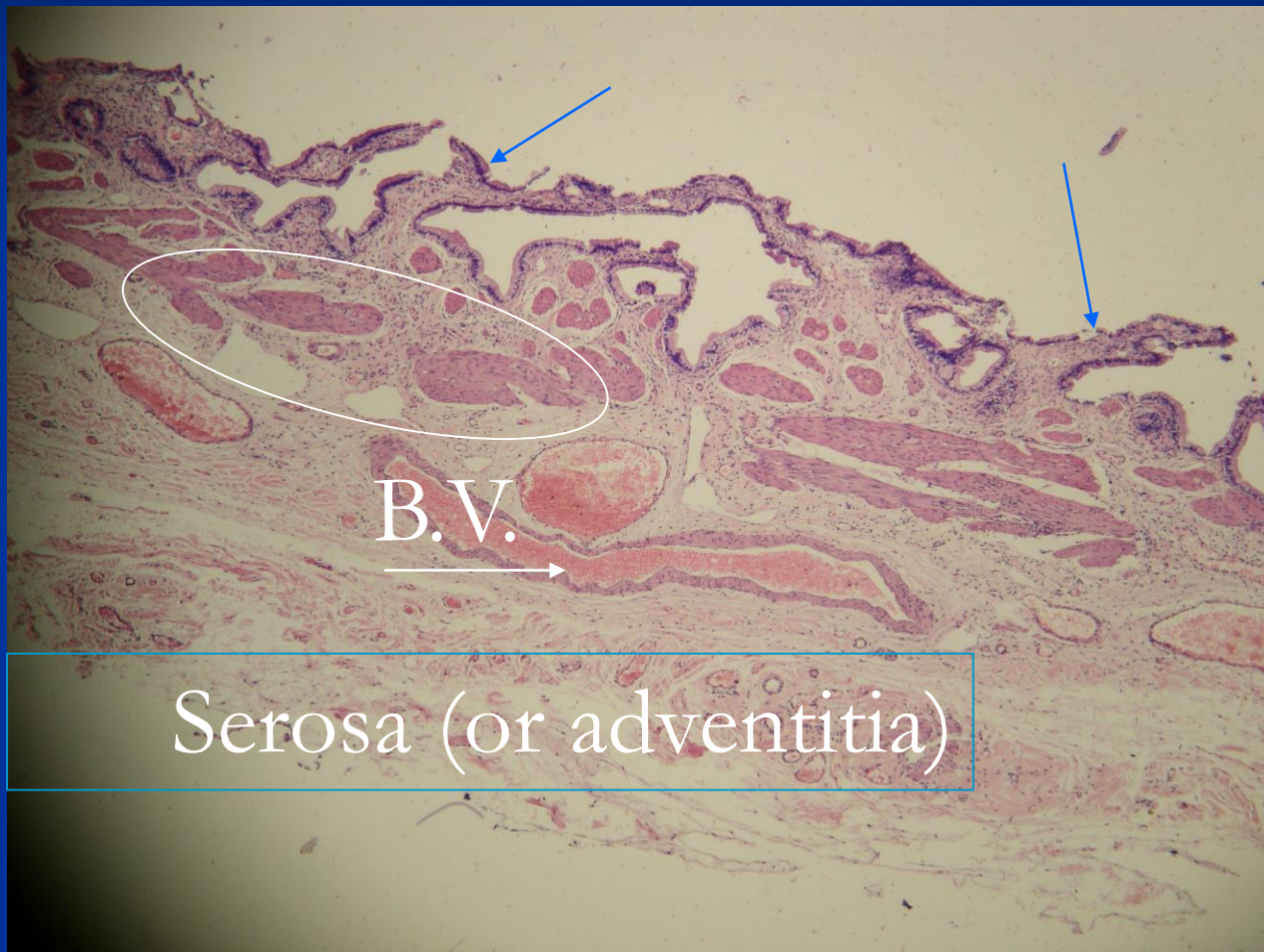


Mu.x.

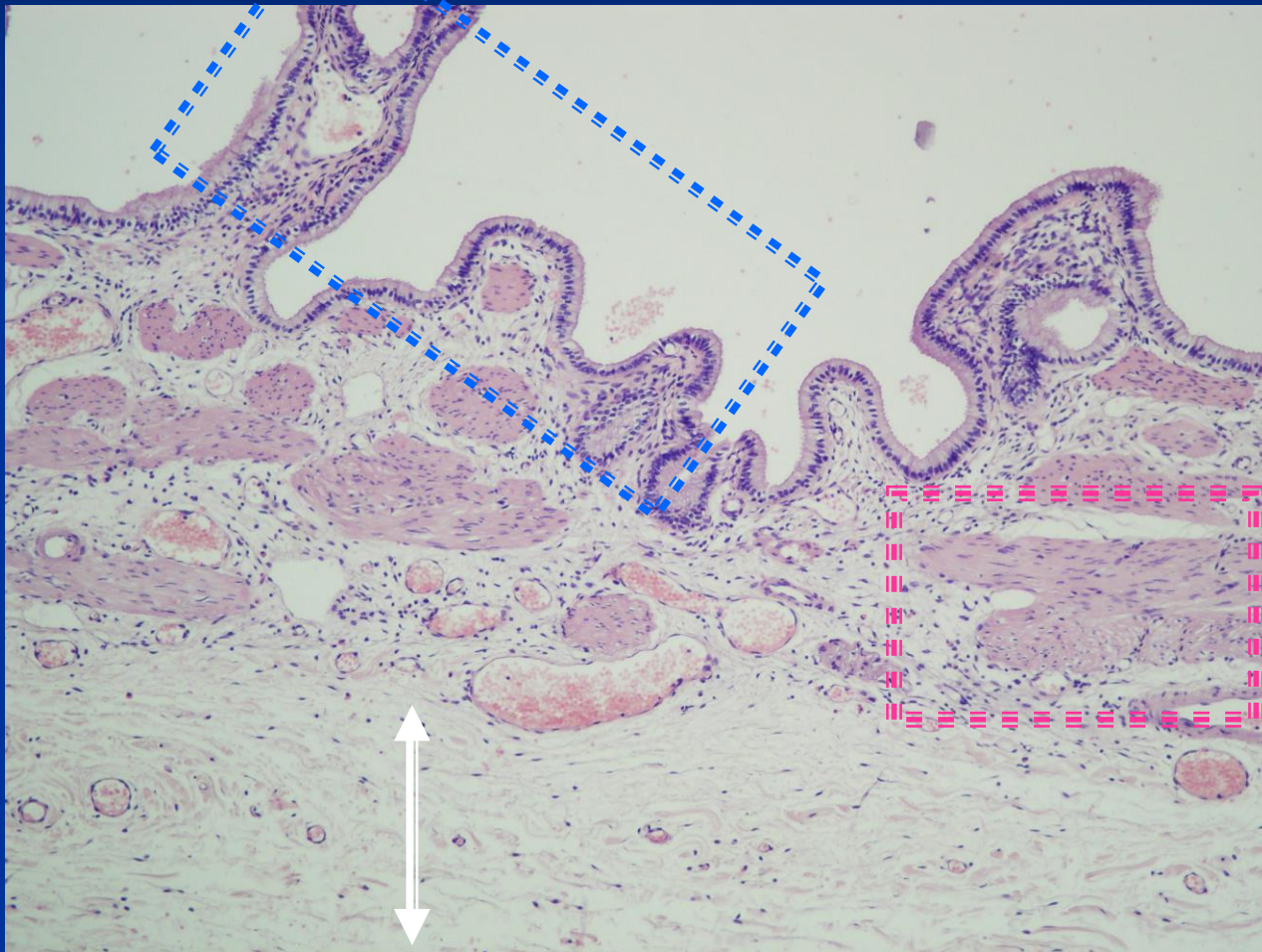


Gallbladder

Honey comb folding. musc. Bundles within lamina propria

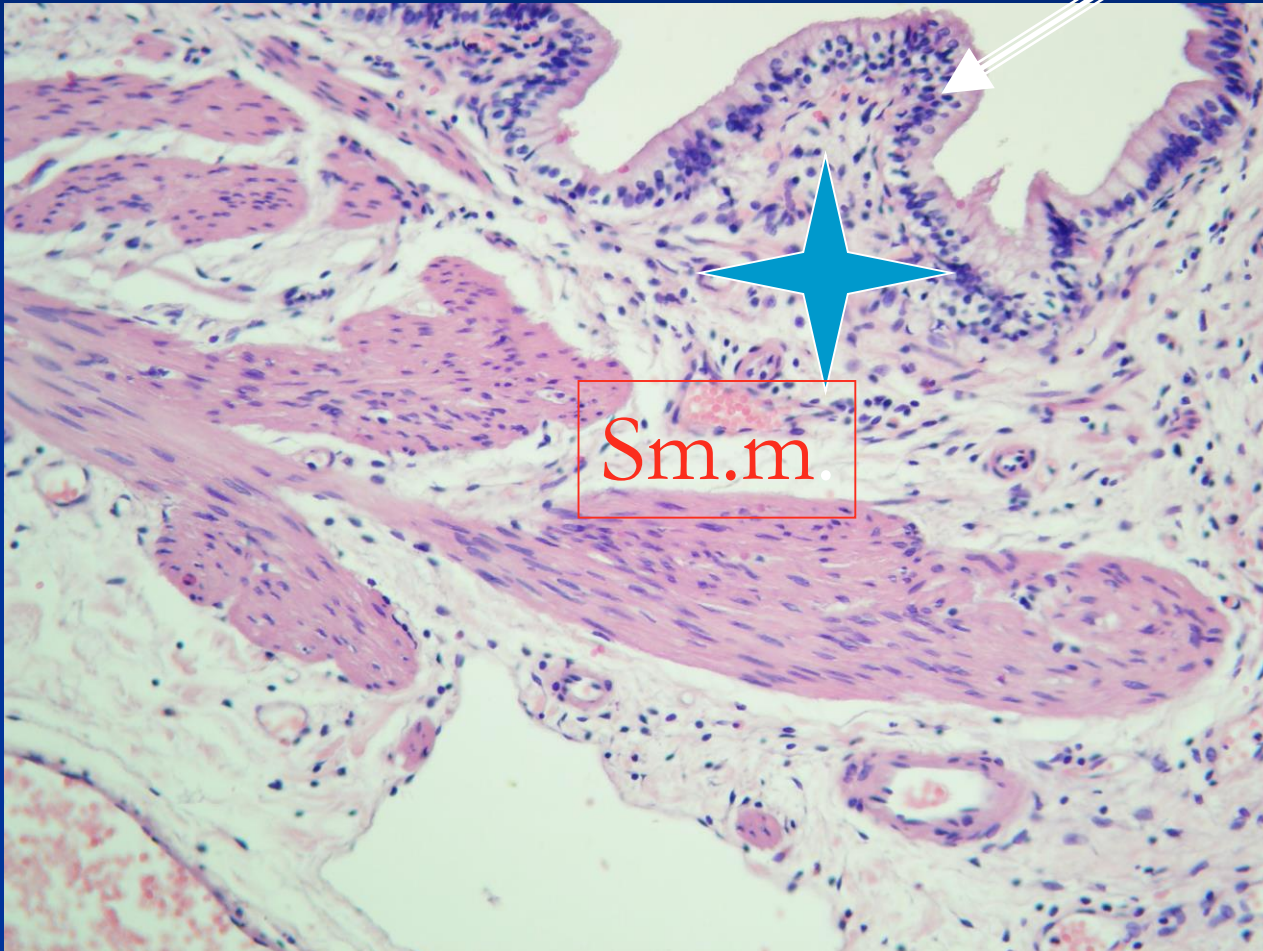


Honey comb folding mucosa musc. Bundles within lamina propria

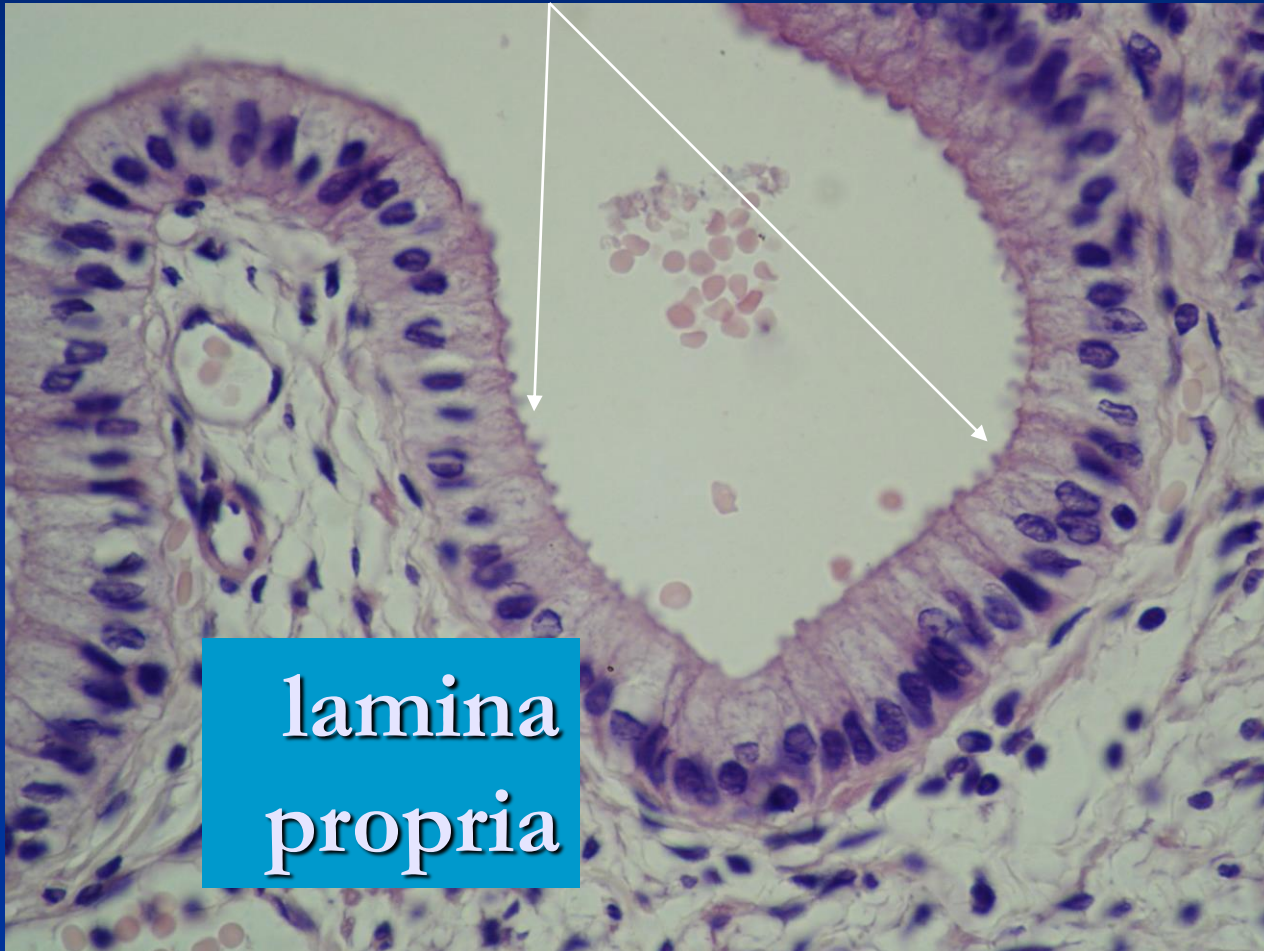


★ lamina propria

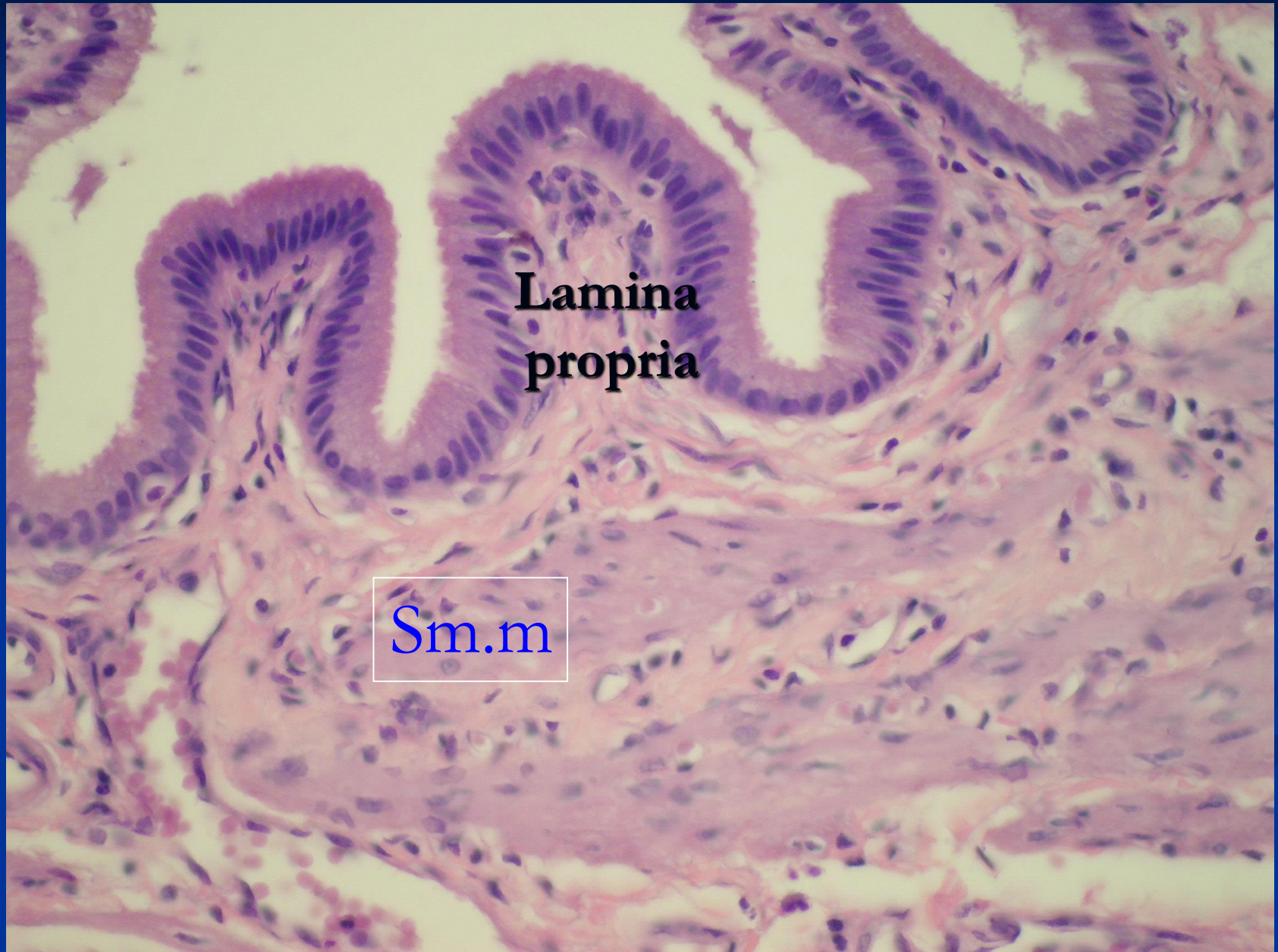
Ep.



Simple columnar epithelium



Gallbladder : Simple columnar epithelium



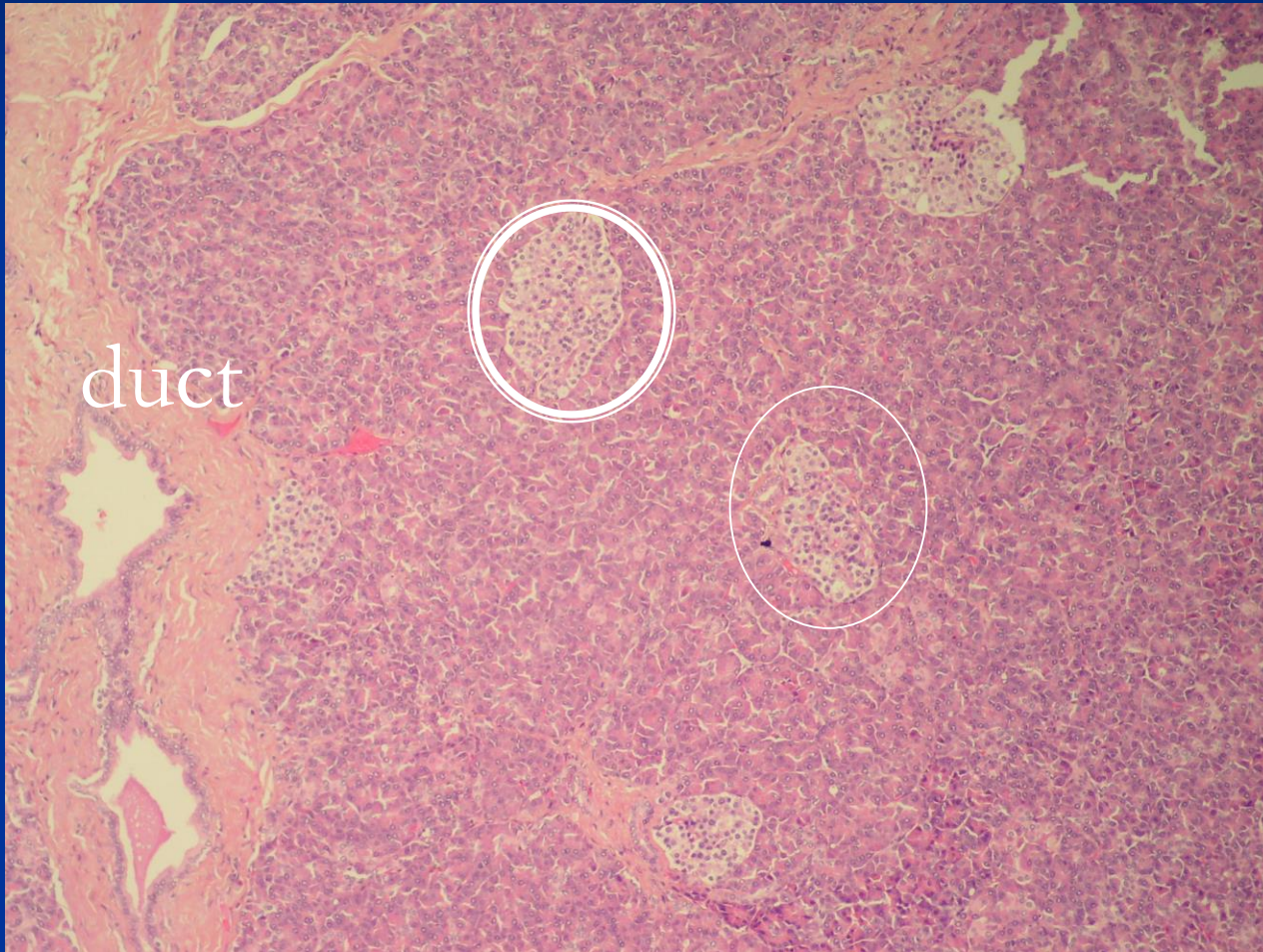
**Lamina
propria**

Sm.m

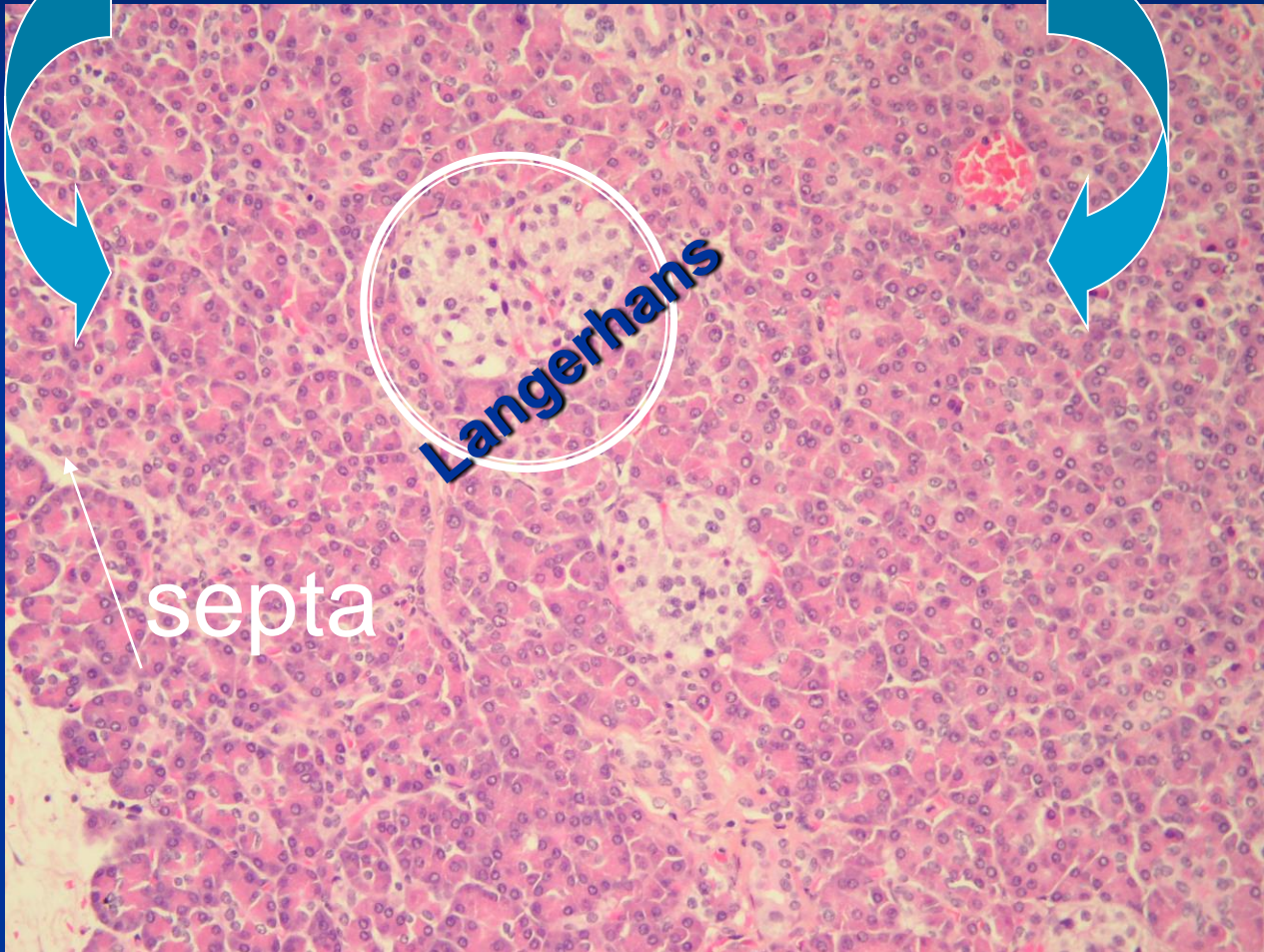
Pancreas

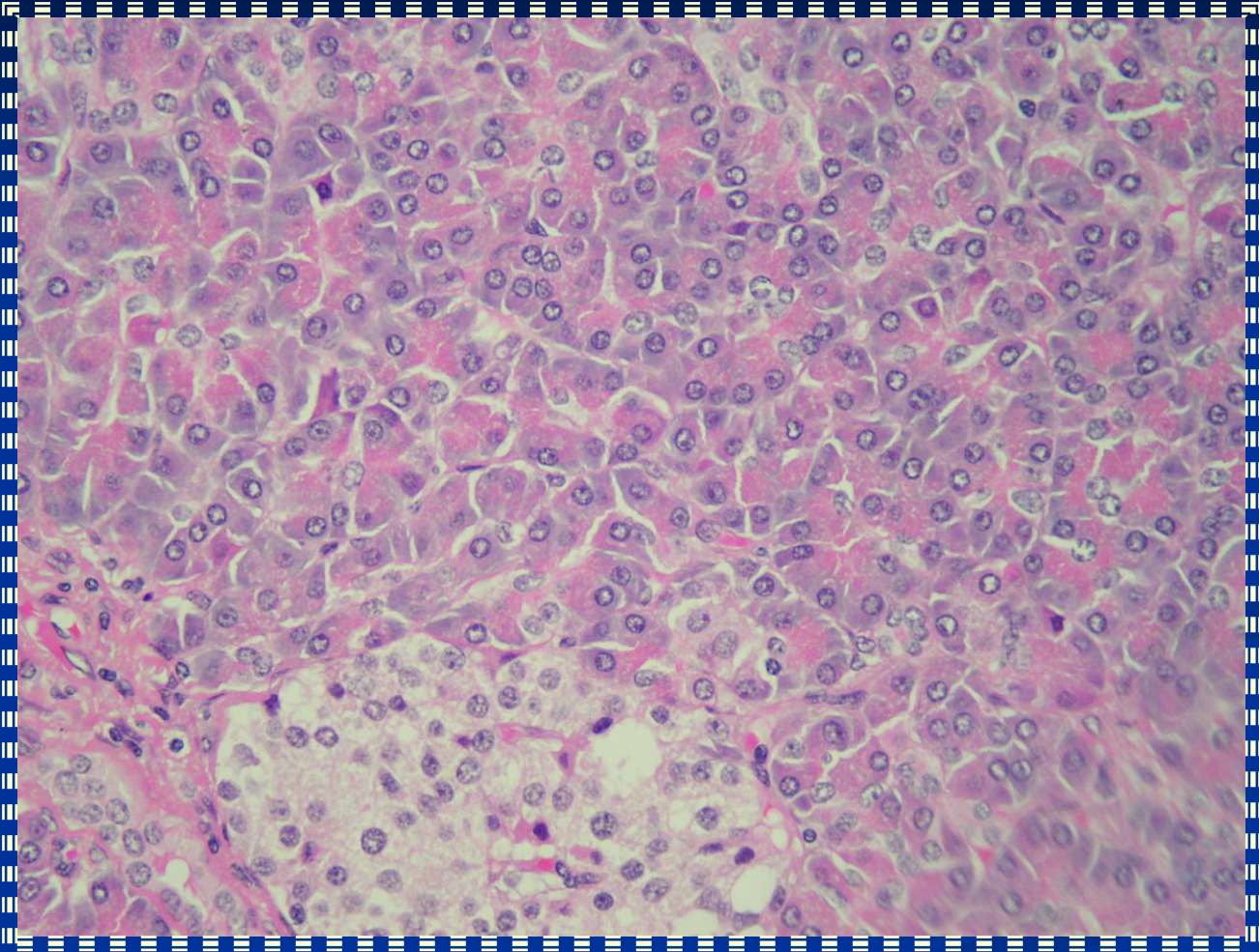
Mixed endocrine-exocrine gland

Islet of Langerhans

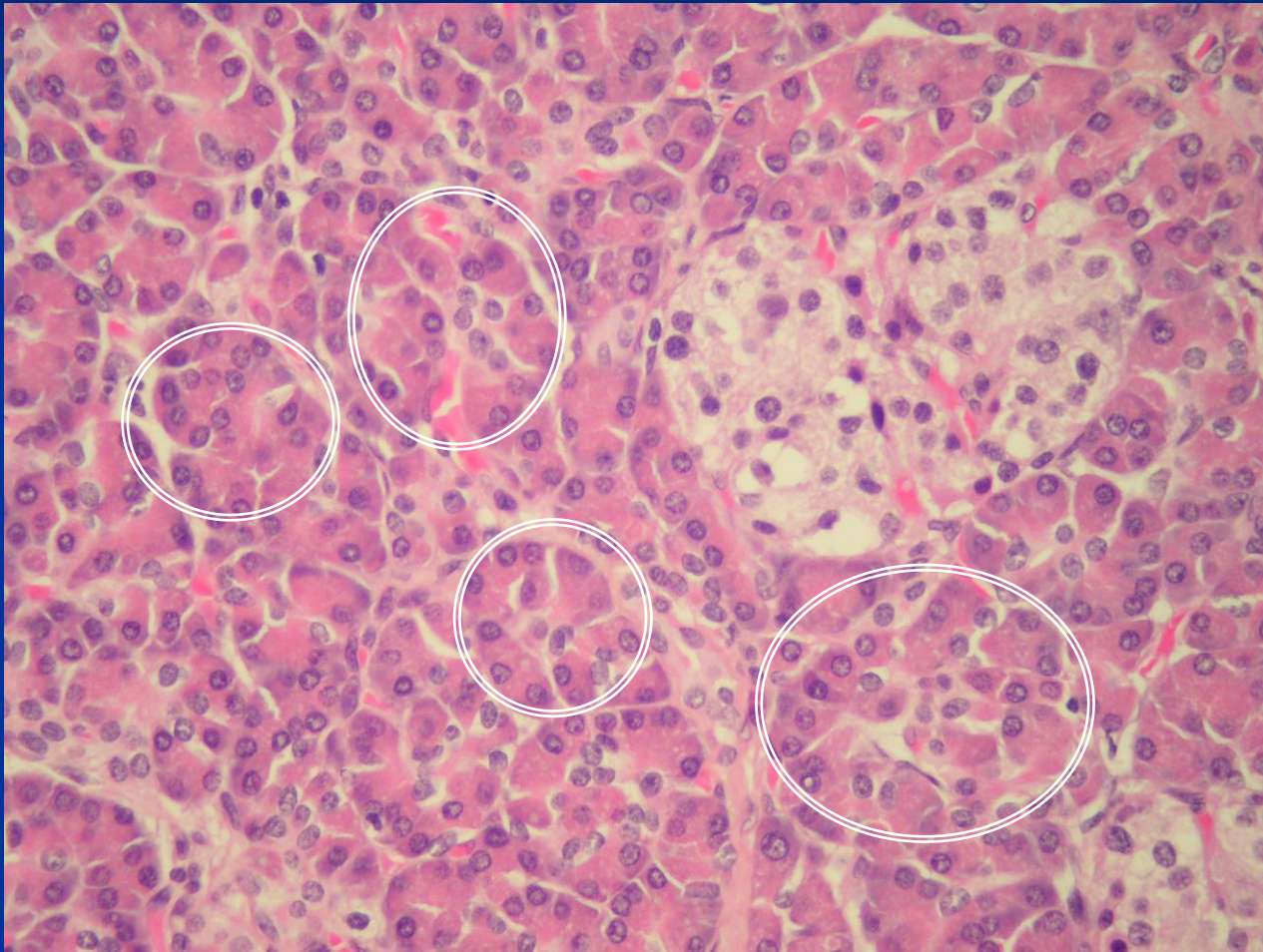


Exocrine pancreatic portion: compound acinar gland



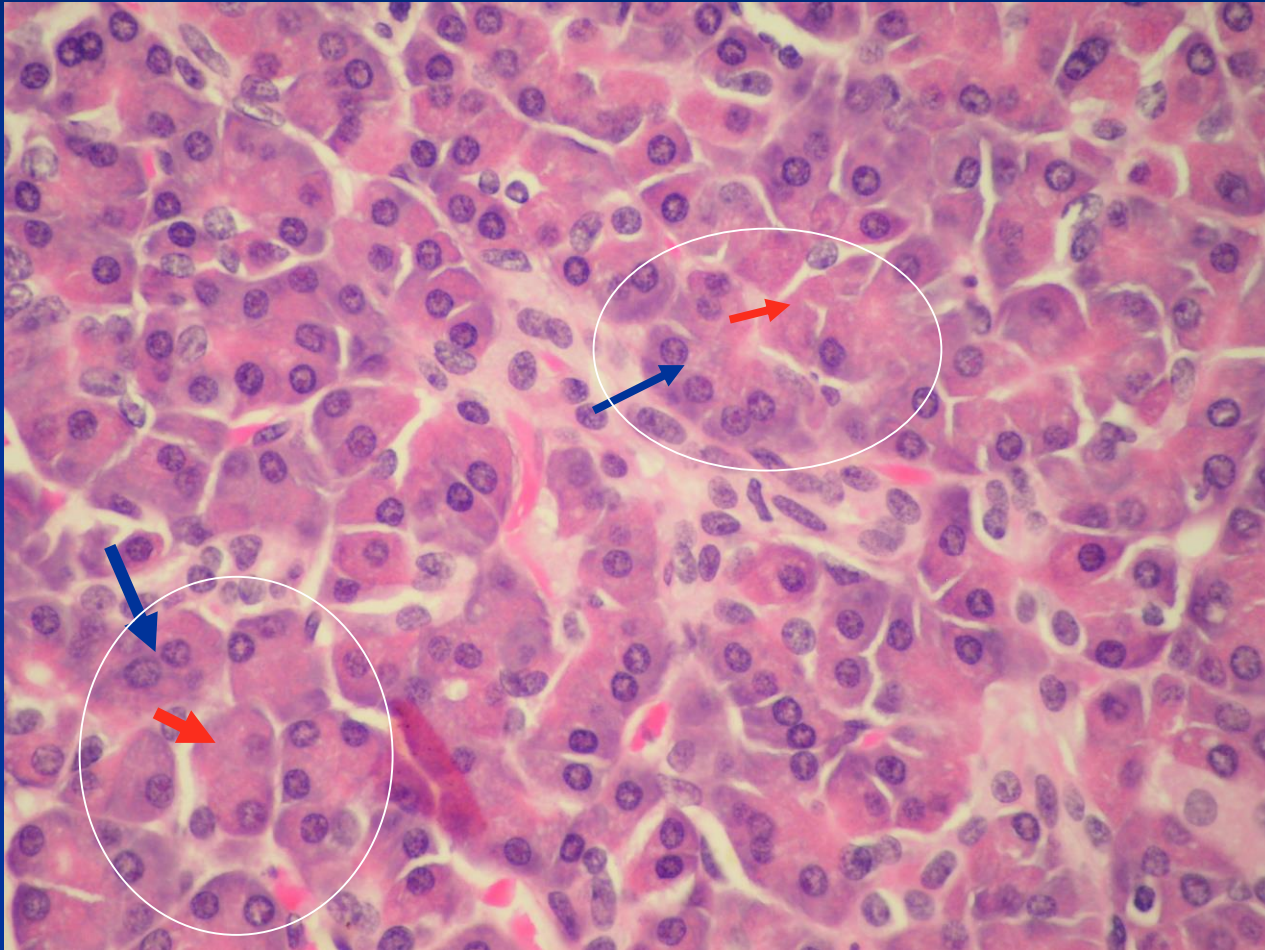


pancreatic Serous acini: protein secretory cells



Zymogenic granules

basophilic cell cytoplasm (=polarity)

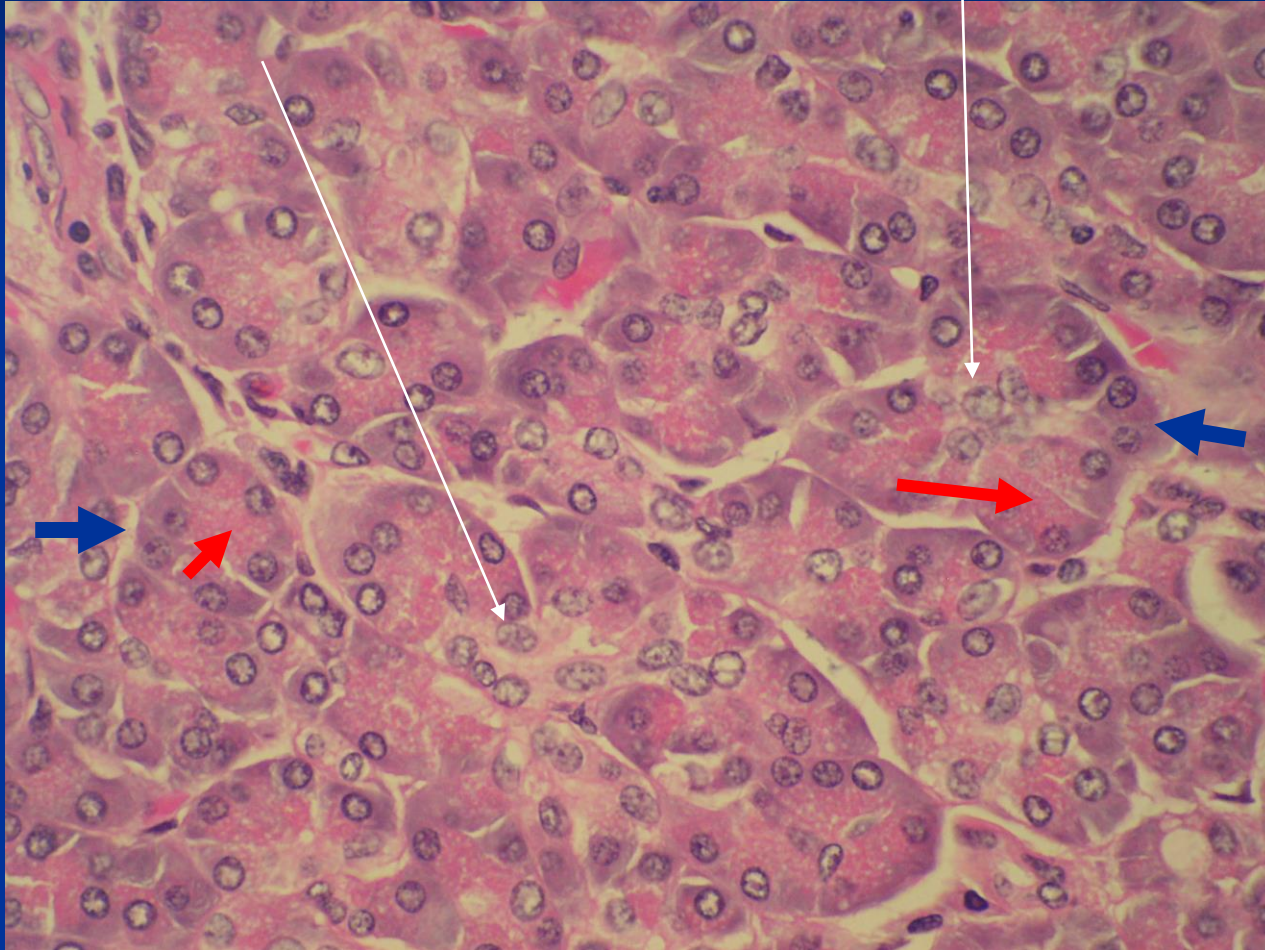


Intercalated duct

Centroacinar cells

Secretory granules

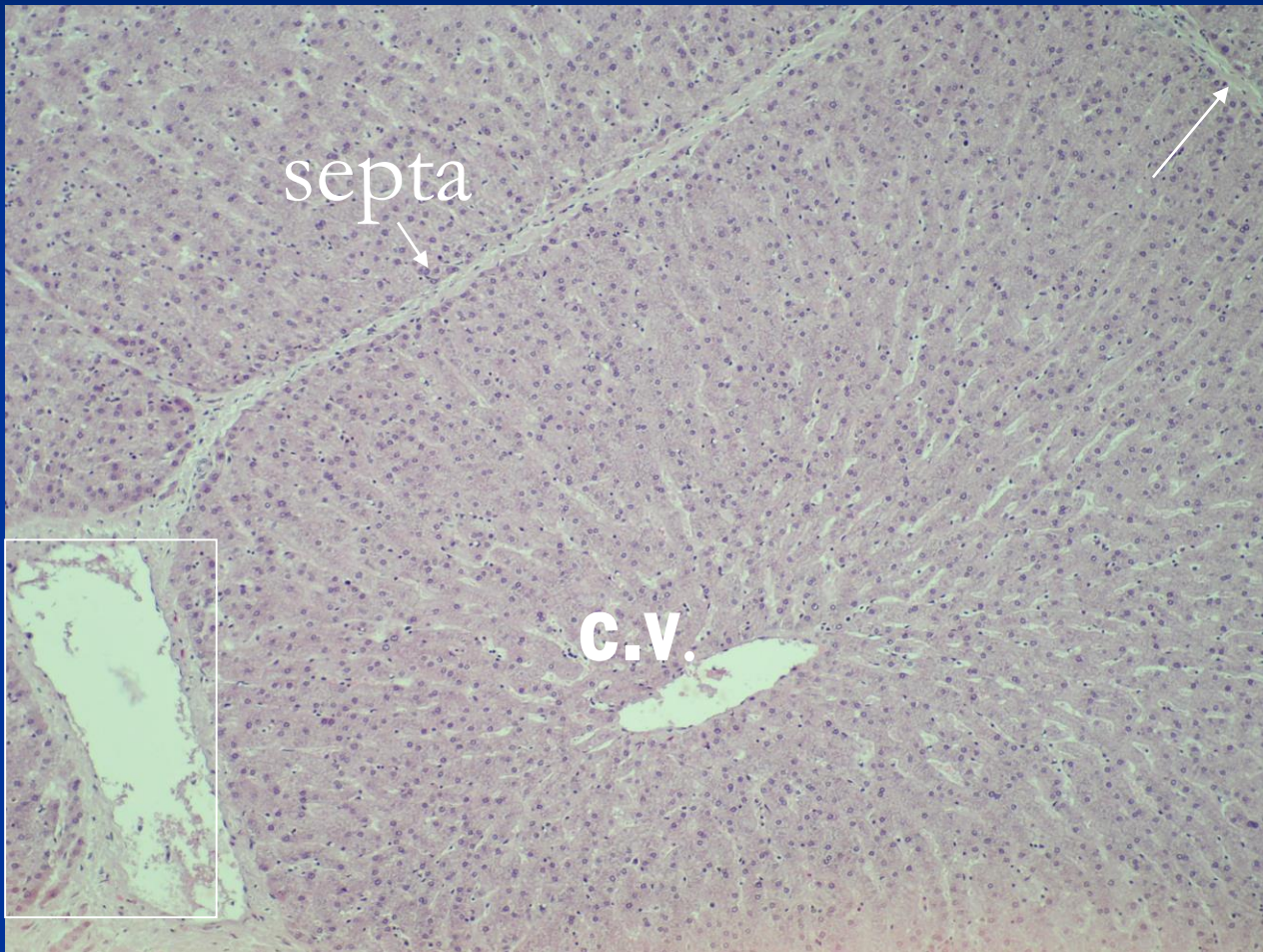
r-ER



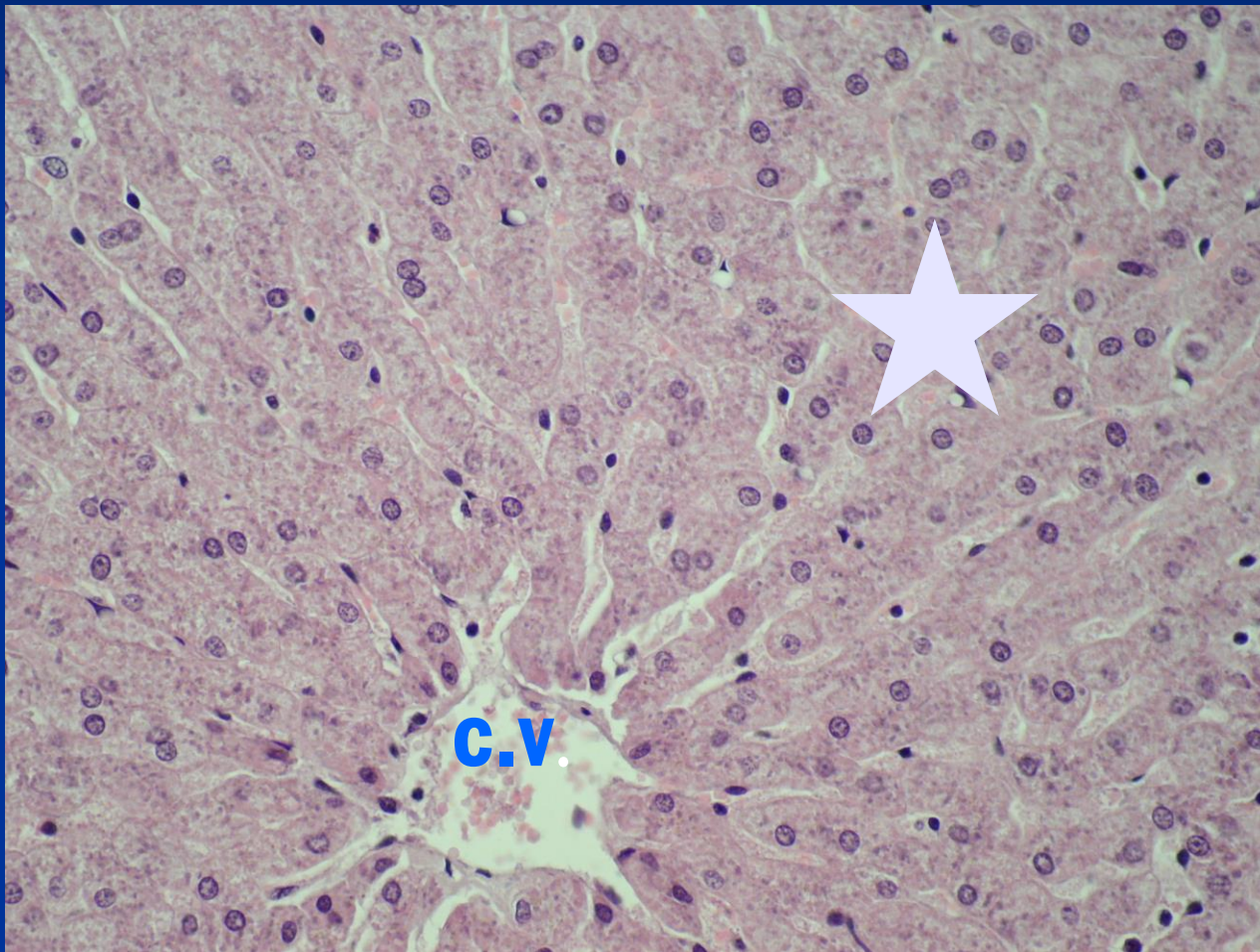
The Liver

Animal liver glisson's capsule

Portal
space

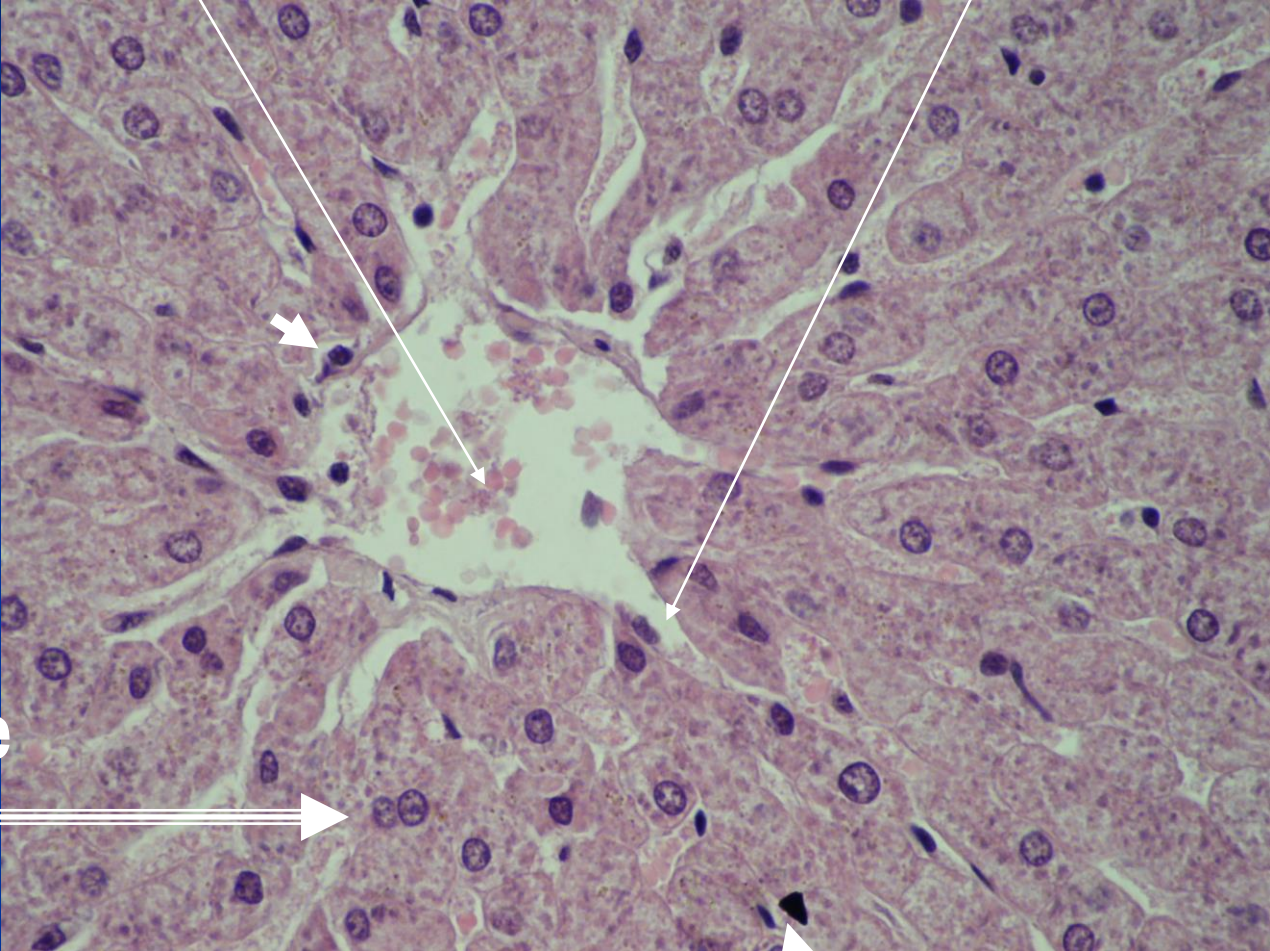


★ Parenchyma portion



Central vein

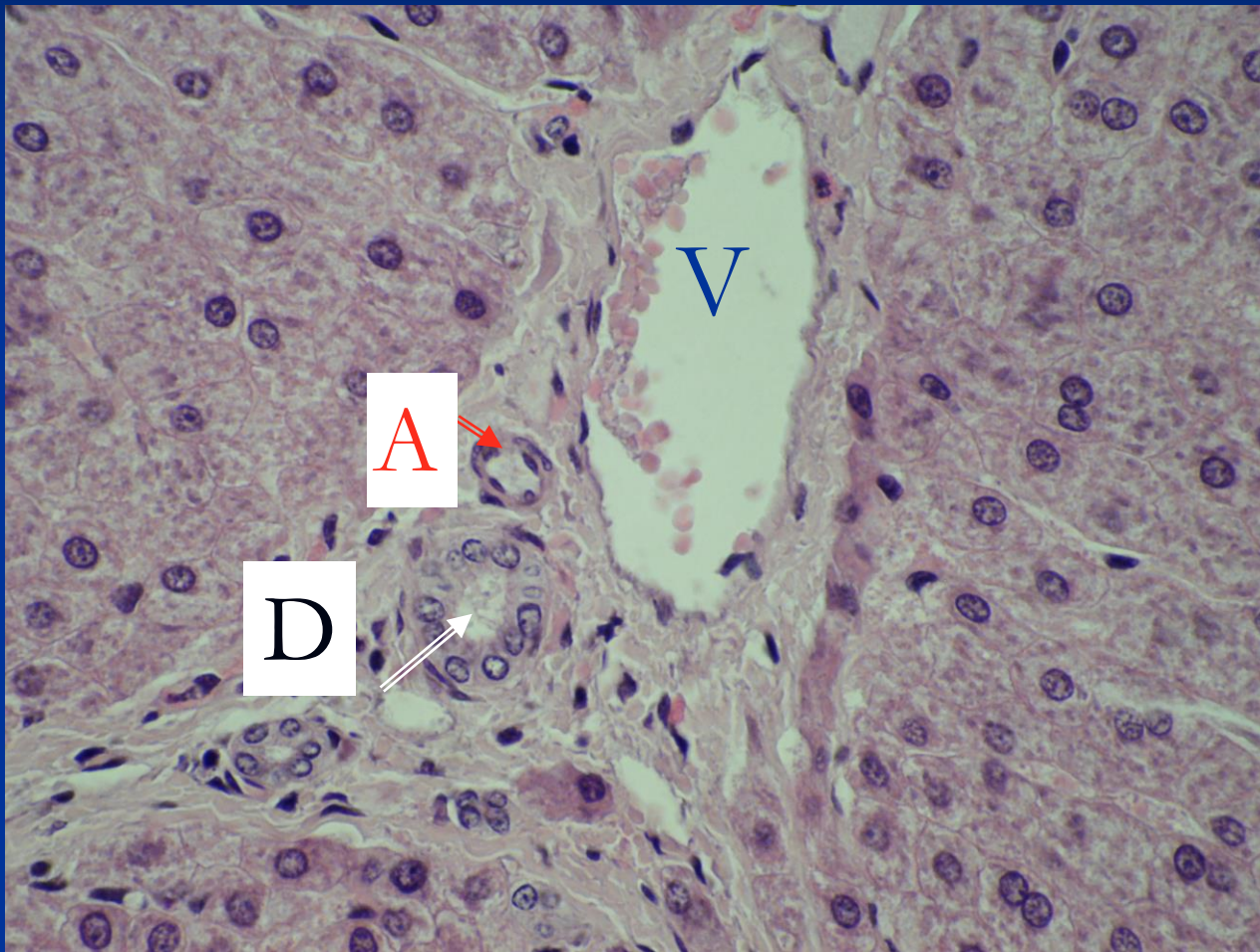
Sinusoid(endothelium)



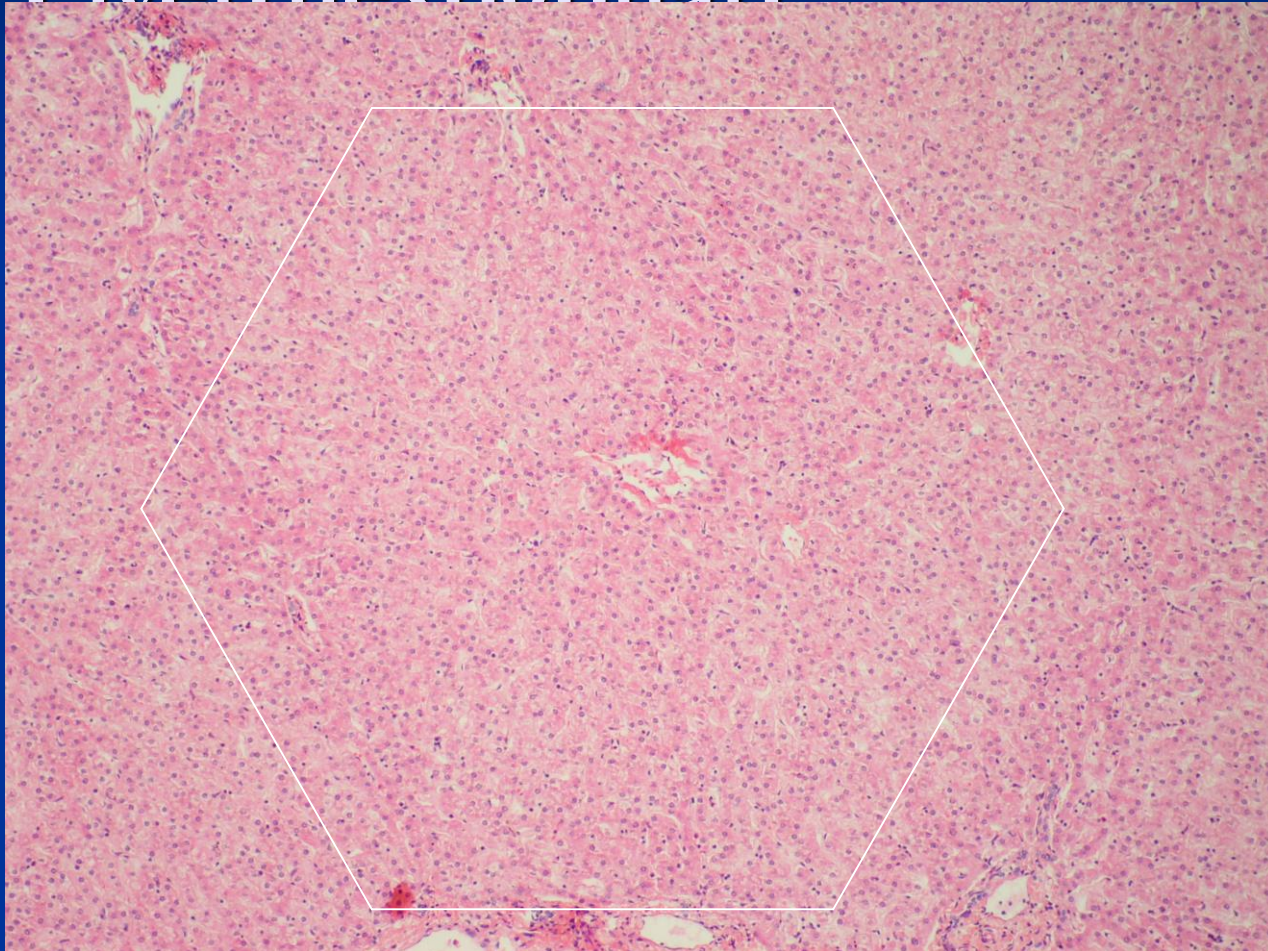
hepatocyte

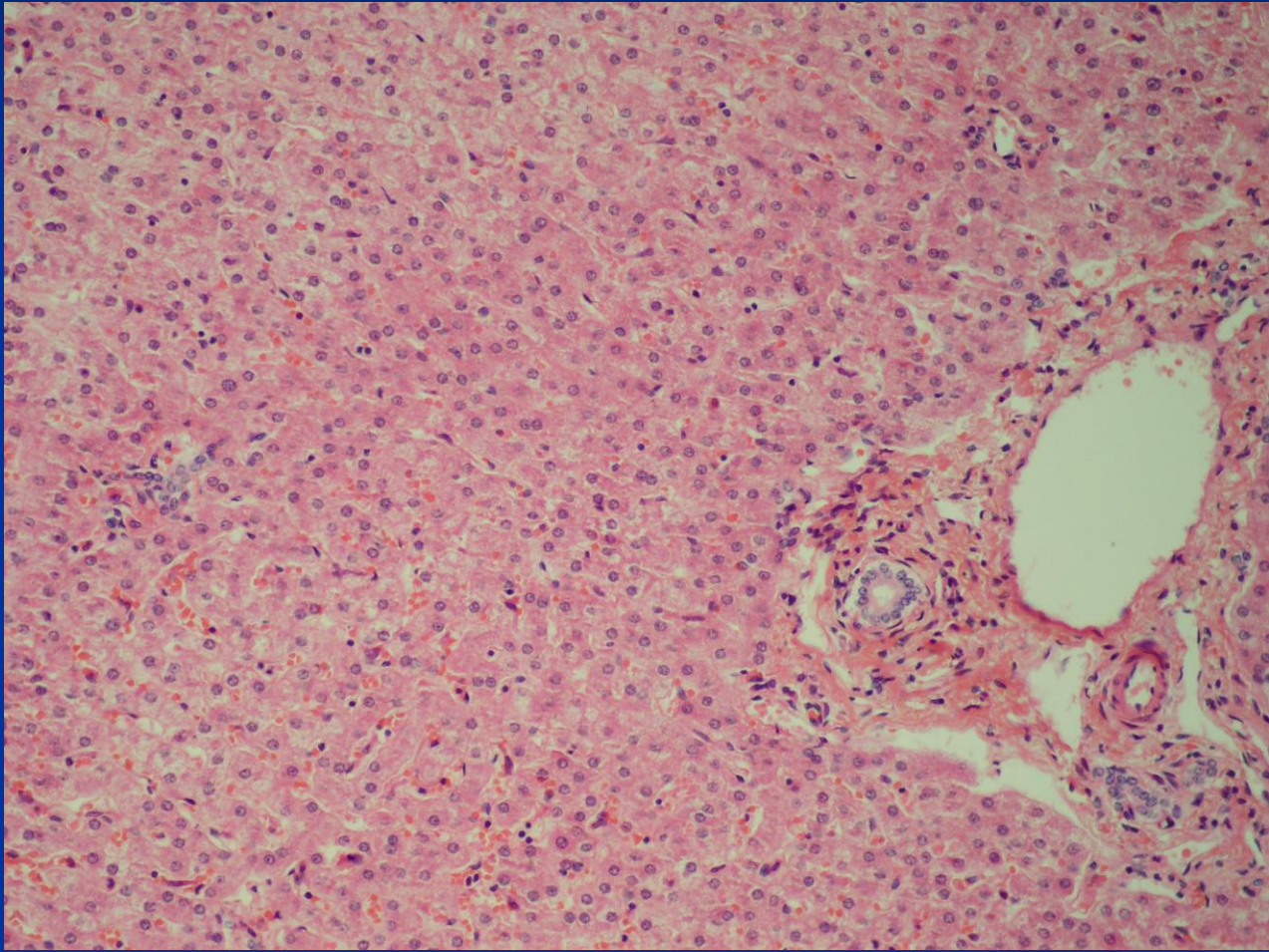
Kupffer Cell

Portal vein - hepatic artery - bile duct

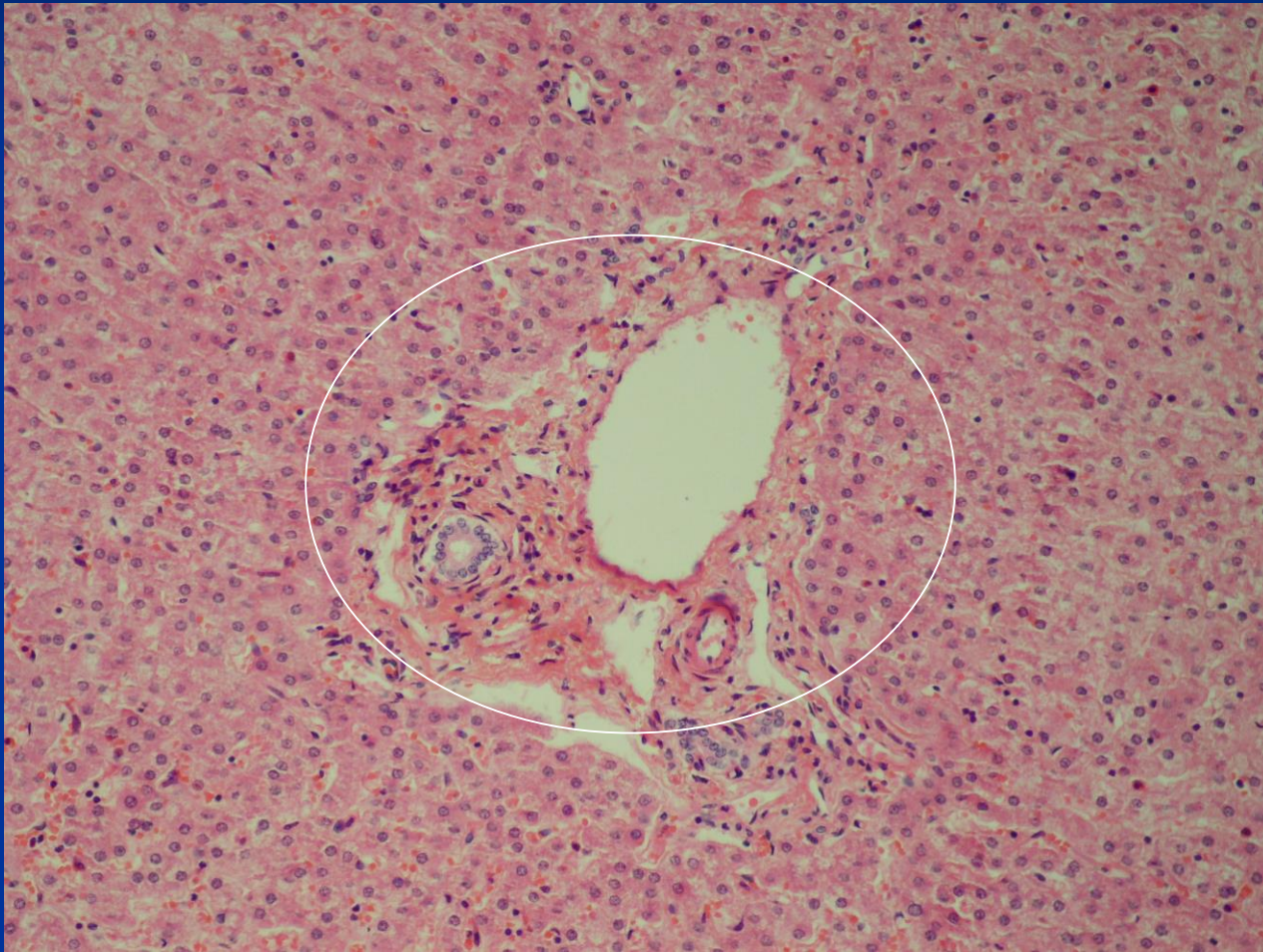


Human Liver(hexagonal)



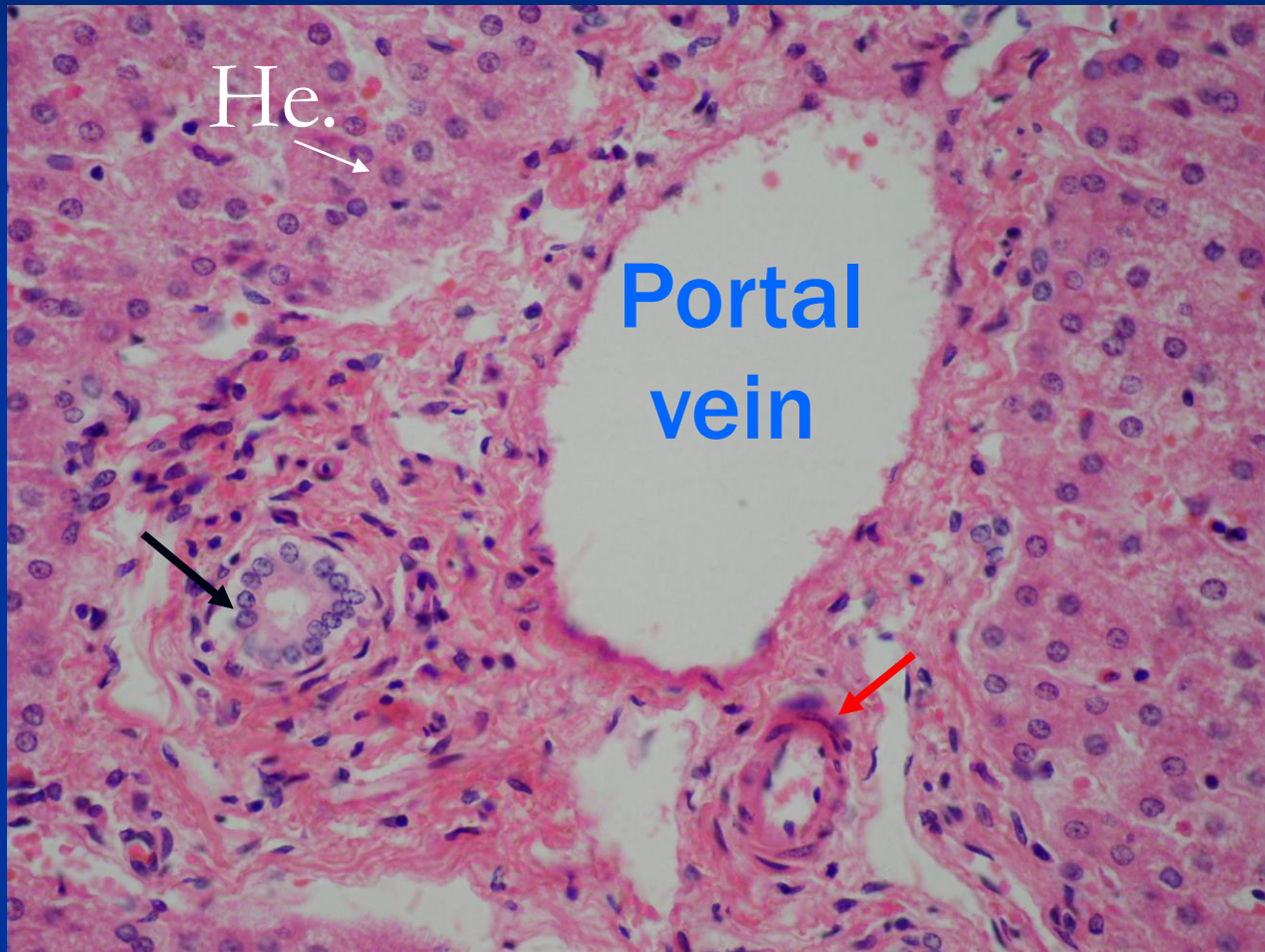


Portal space

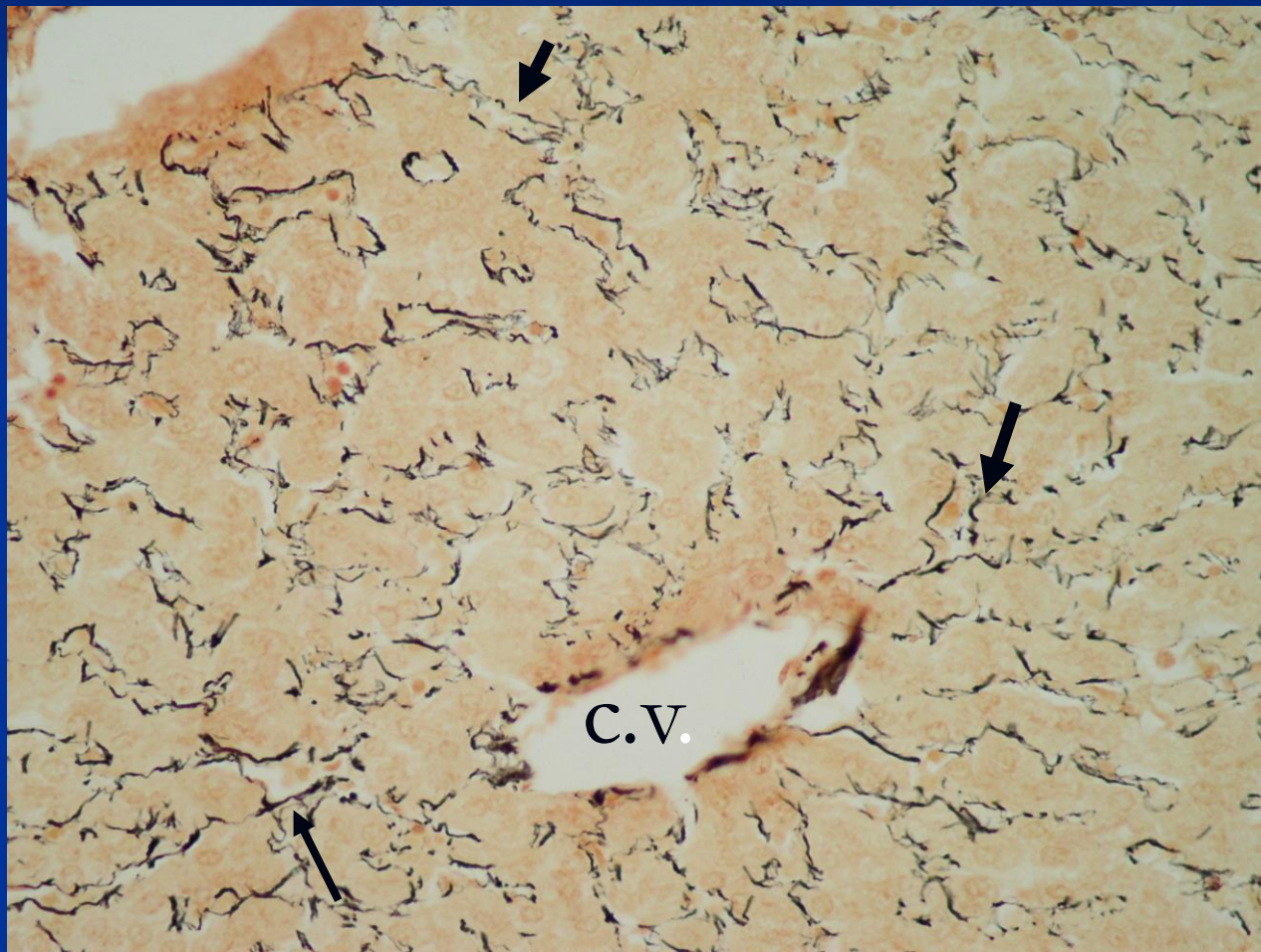


bile duct

hepatic artery



Silver impregnation reticular fibers = argyrophilic



P.A.S reaction glycogen

