


Sistem Hepatobilier

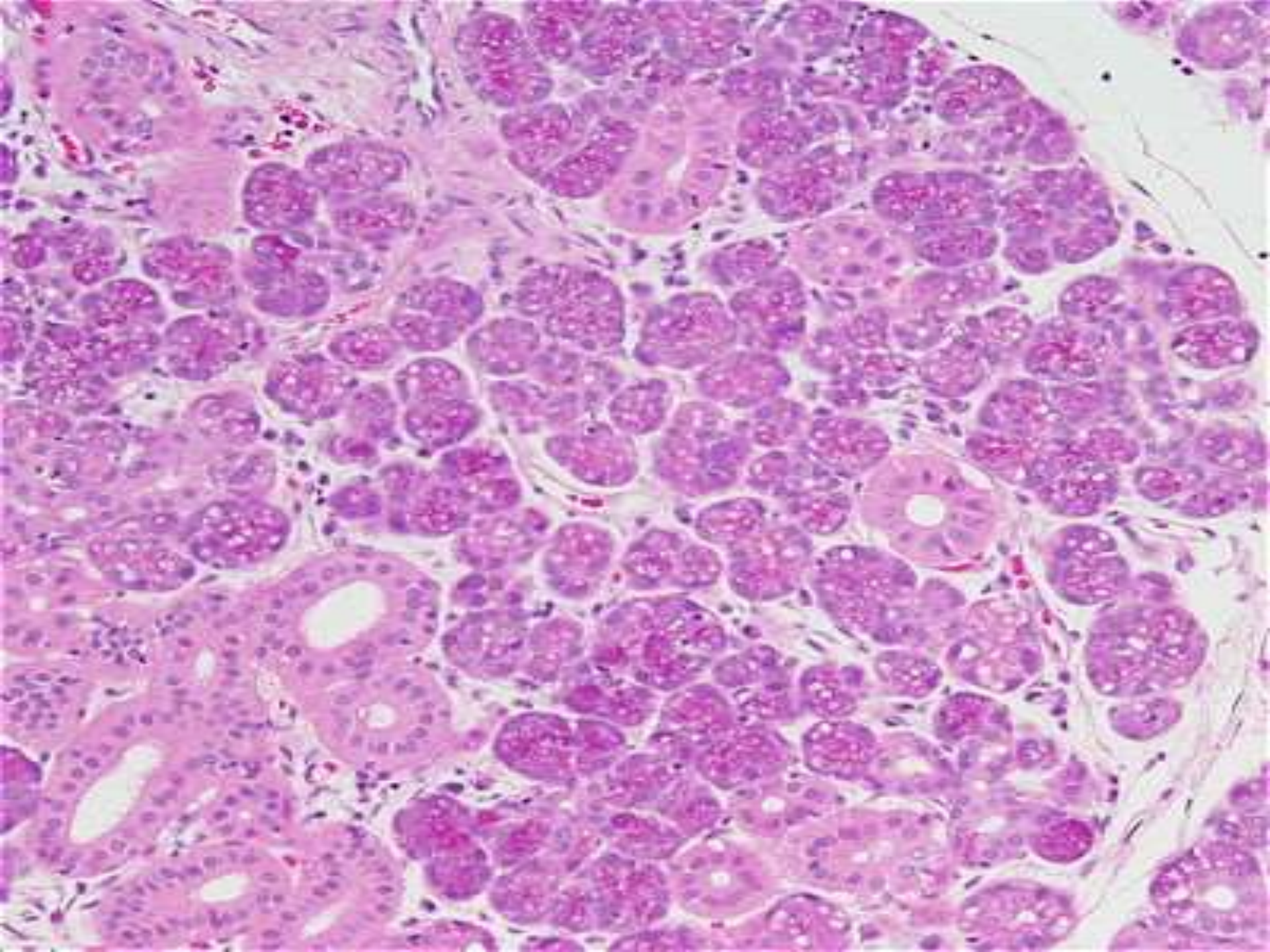
Desy Andari
Lab Histologi
FK UMM

Kelenjar Kelenjar GIT

- ▶ Intrinsic Gland
 - ▶ Kelenjar Saliva
 - ▶ Hepar
 - ▶ Pancreas
- 

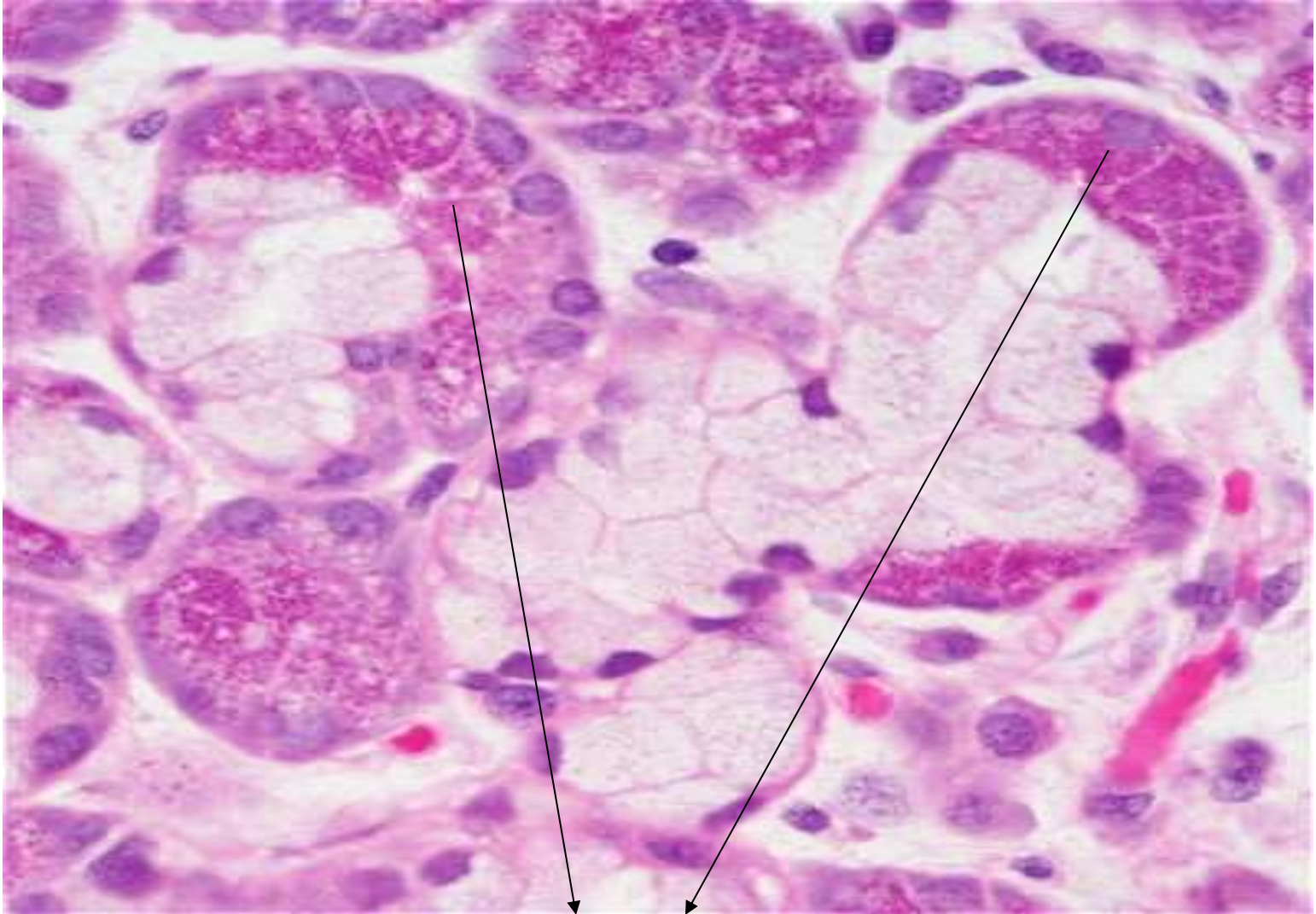
Kelenjar Saliva

- ▶ Kelenjar Parotis:
 - Terbesar
 - Bentuk tubuloaciner
 - Sifat Sekresi: Serous murni
 - Saluran:
 - D. intercalatus
 - D. interlobularis
 - D. interlobaris
 - D. excr. (Stenoni)

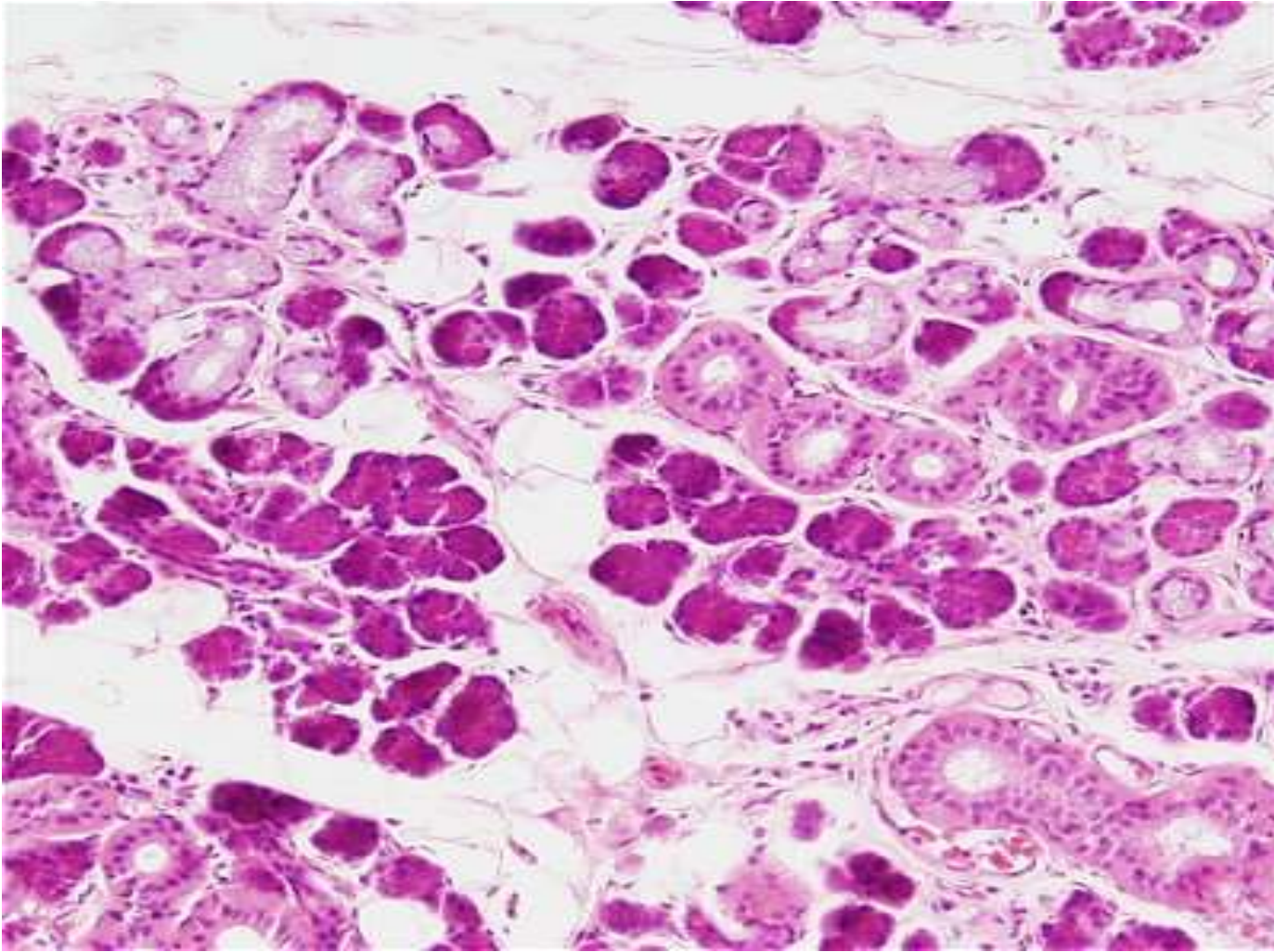


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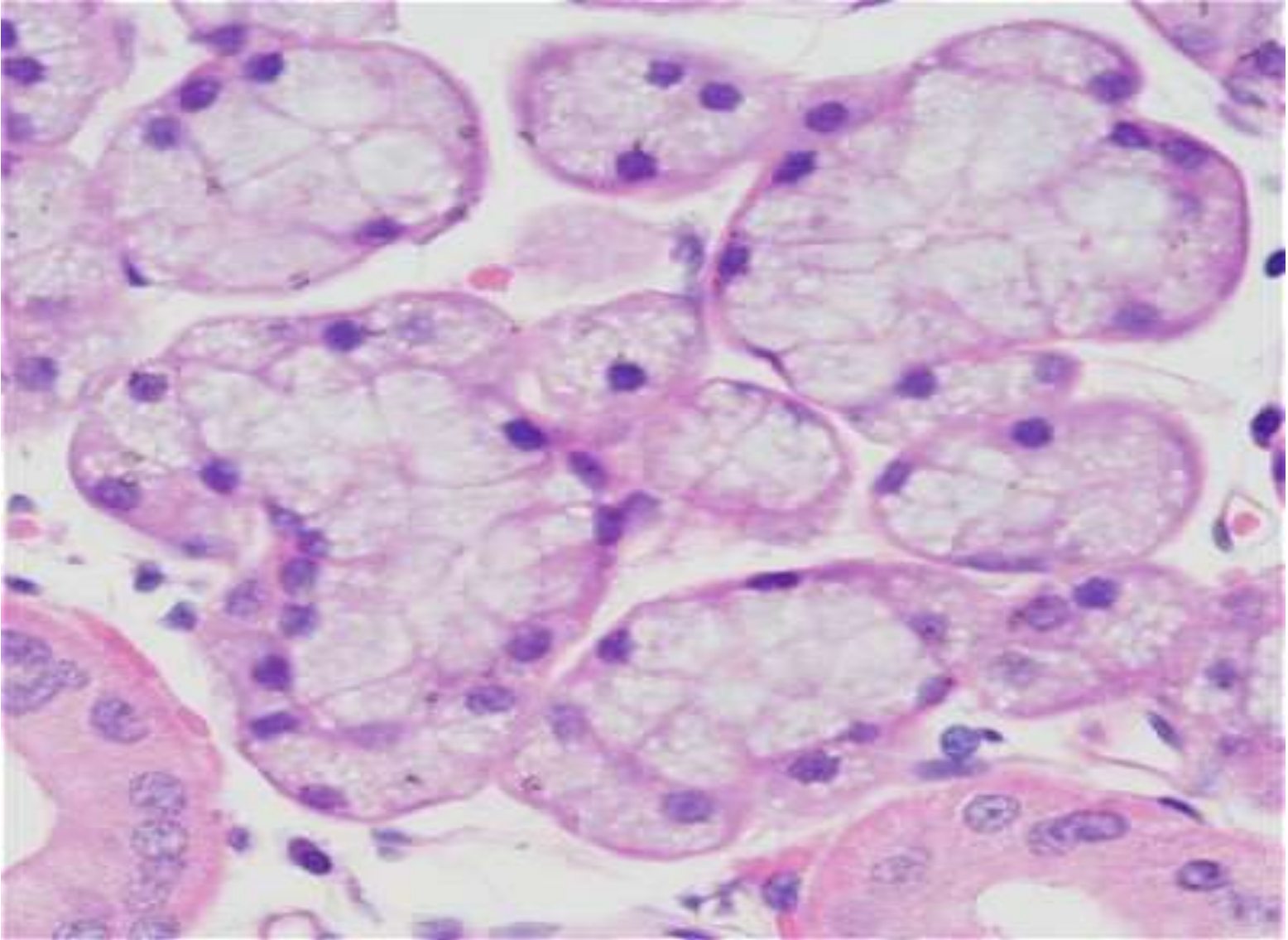
- ▶ **Kelenjar Submandibularis**
 - Sifat sekresi: muco-serous
 - Demilune Gianuzzi
 - Saluran Utama: duct. Whartoni
- ▶ **Kelenjar Sublingualis**
 - Sifat sekresi: sero-mucous
 - Saluran kecil2 dibawah lidah



Demilune Gianuzzi



Kelenjar submandibular



Kelenjar mucous

Hepar

- ▶ Eksokrin & endokrin
- ▶ Kapsula Glisson – lobus – lobulus
- ▶ Komponen Hepar:
 - Parenchym – lempeng2 hepatosit
 - sinusoid

Hepatosit

- ▶ Bentuk Polihedral
 - Dinding permuk. Bebas: mikrovili (space of Disse)
 - Sitoplasma:
 - Organella
 - Inclusion: glikogen, fat
 - Inti
- ▶ 25% binucleat

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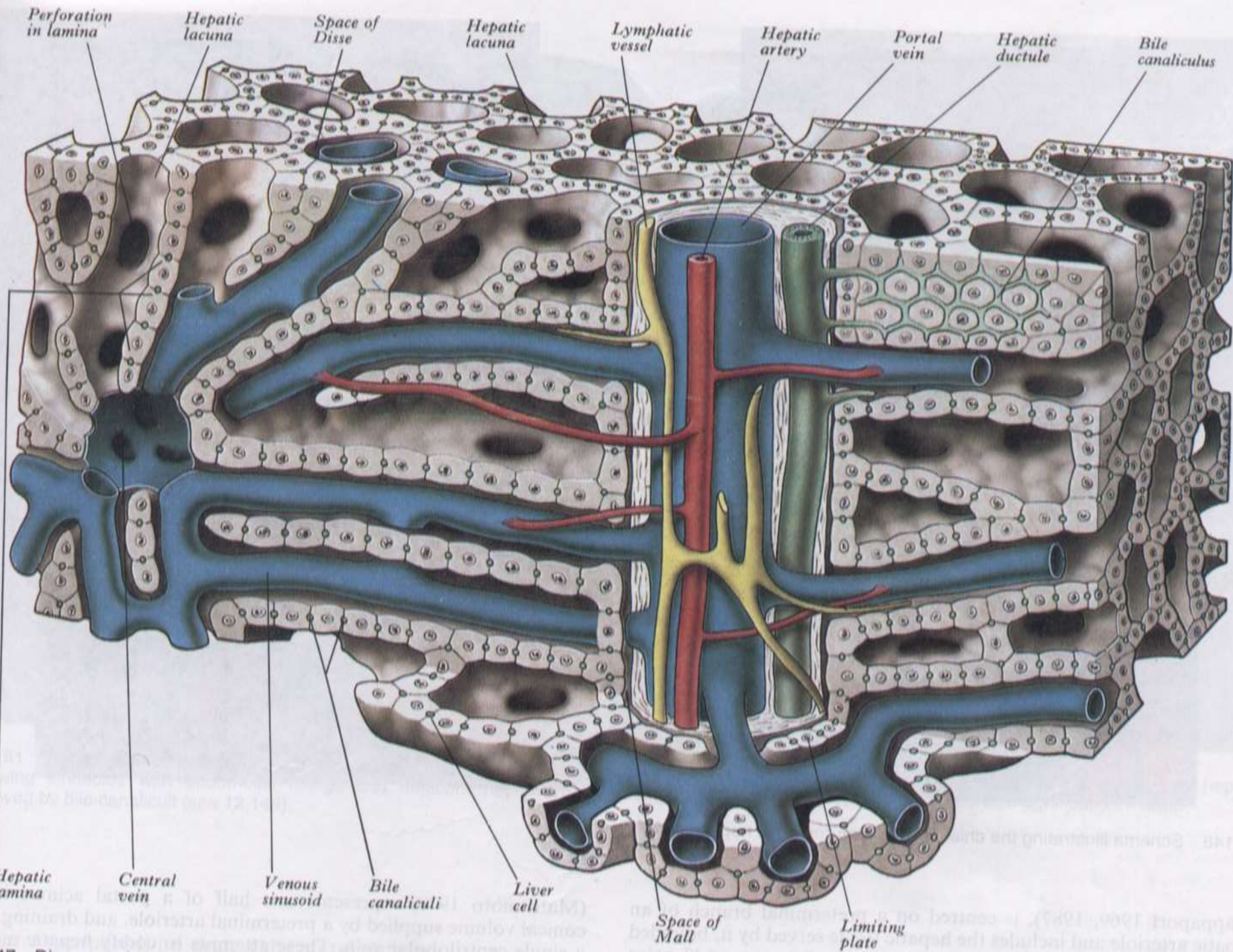
- ▶ Membran 2 sel hepar yang berdekatan:
Canaliculi biliaris

Canalis Hering | (ductulus biliaris)

Ductus Interlobularis
(ductus biliaris)


Sinusoid

- ▶ Sistem kapiler – fenestrated
- ▶ Dinding:
 - Sel endotel
 - Sel kupffer – macrophage (monosit)
- ▶ Space of Disse: antara kapiler & hepatosit
 - Berisi:
 - Fat
 - Serabut reticular

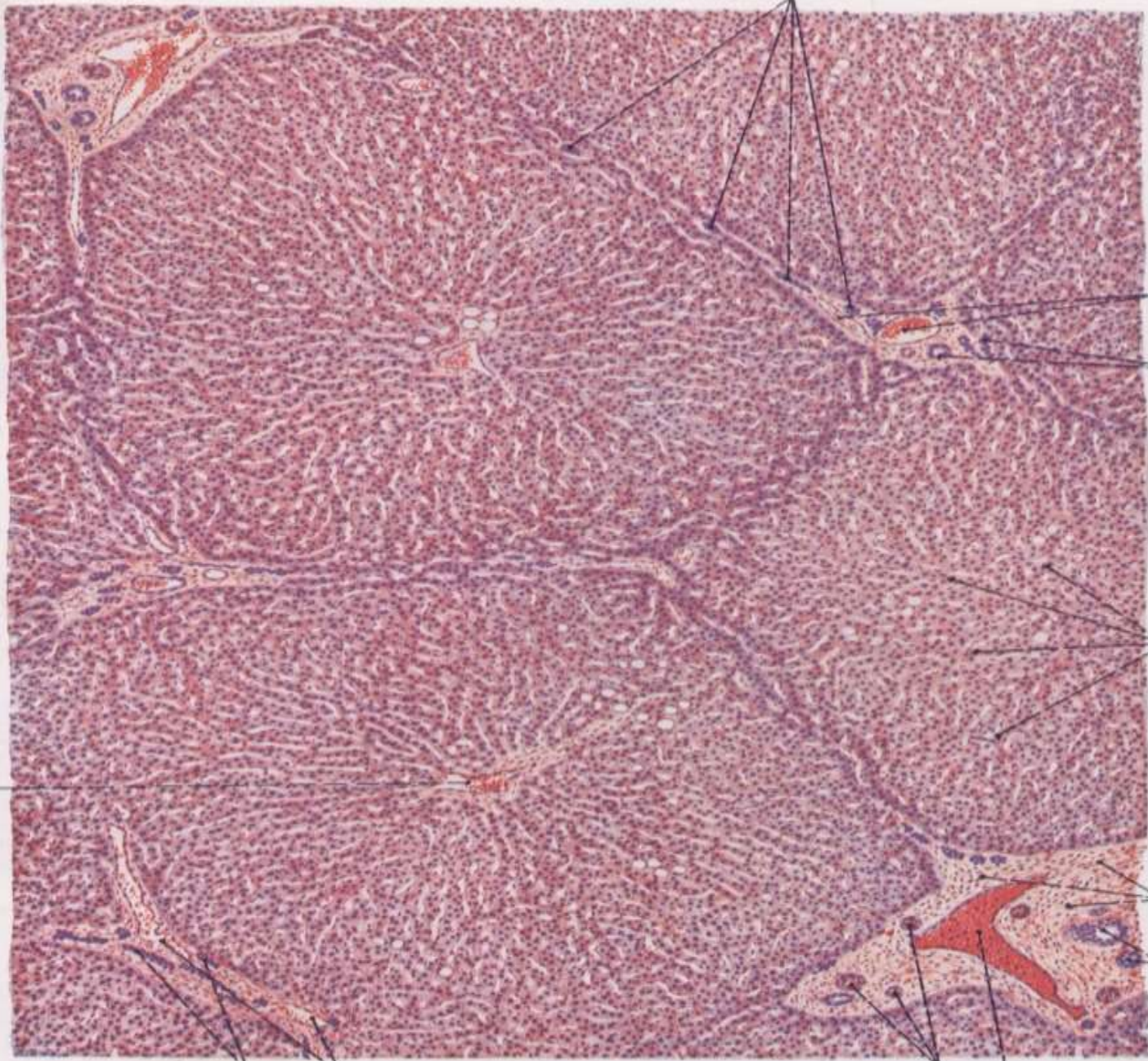


Triad Portal = Segitiga Kiernan

▶ Isi:

- Vena interlobularis
 - Arteri interlobularis
 - Ductus biliaris
 - Pembuluh limfe
 - Serabut saraf unmyelinated
 - Jaringan ikat
- 

Ductus interlobularis bilifer



Cabang interlobularis vena porta

Ductus interlobularis bilifer

Lamina hepatica

Jaringan ikat interlobularis

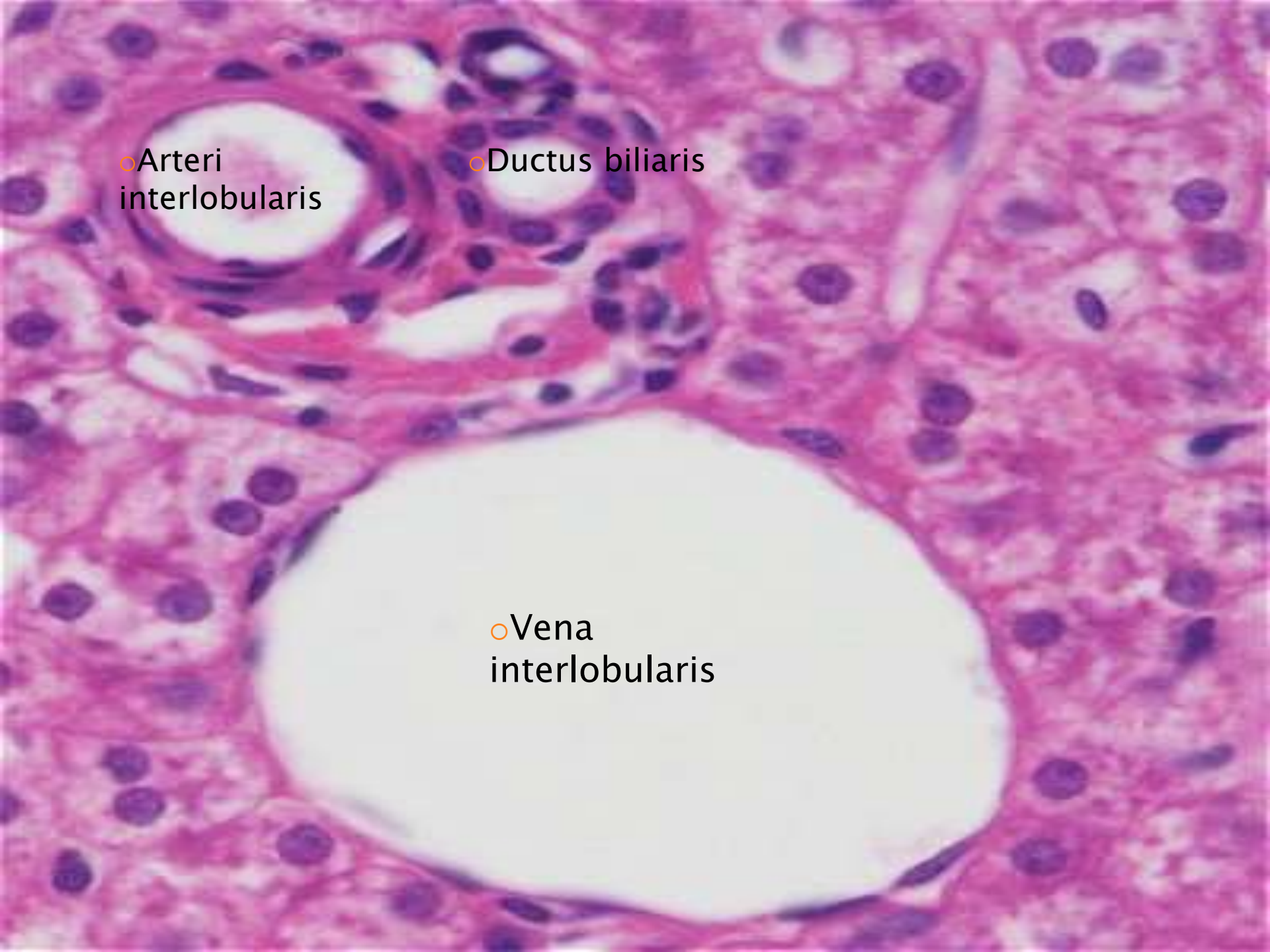
Ductus interlobularis bilifer

Ductus interlobularis bilifer

Cabang vena portae hepatis

Cabang arteria hepatica

Cabang vena porta



oArteri
interlobularis

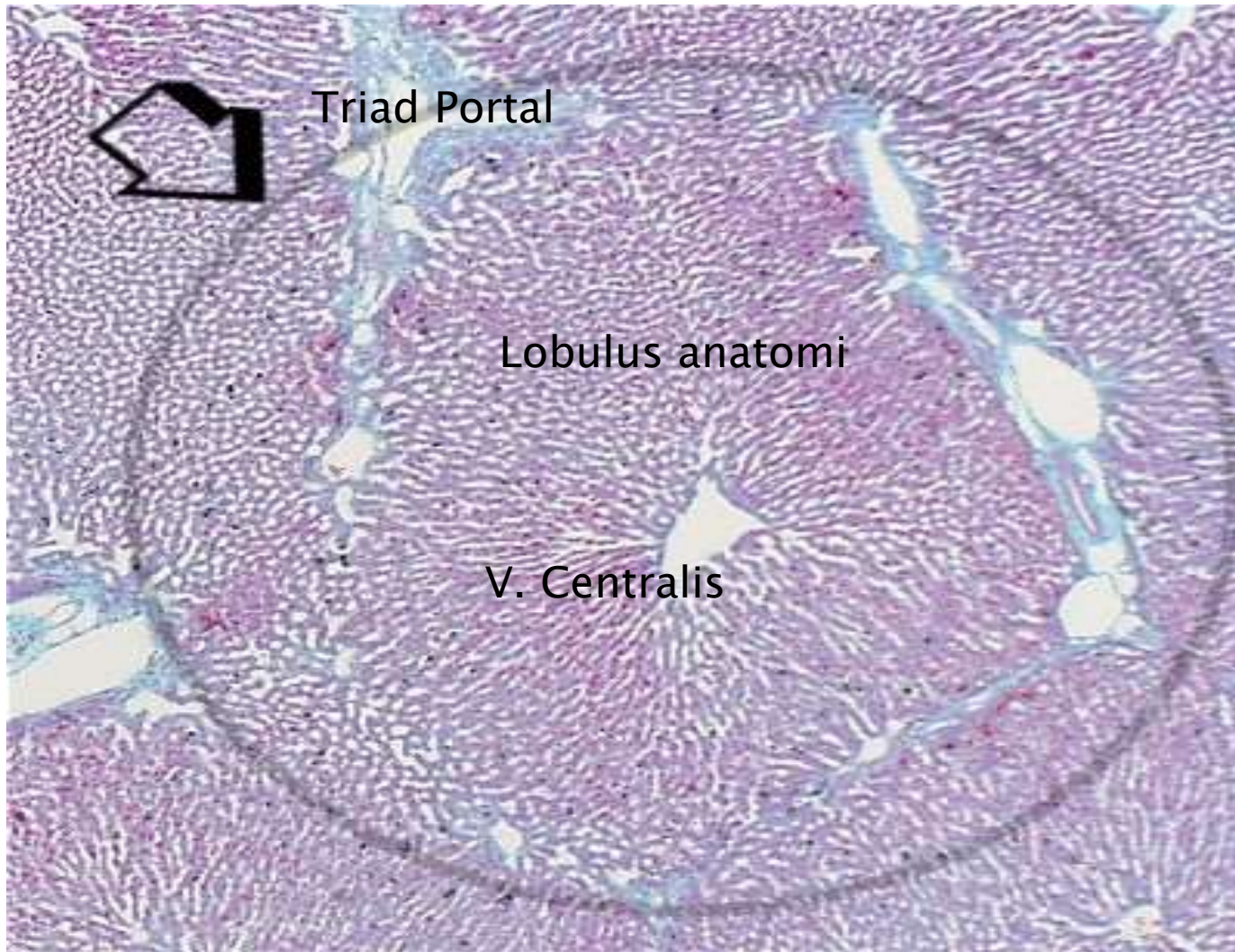
This histological image shows a section of liver tissue stained with hematoxylin and eosin (H&E). The tissue is organized into lobules, which are separated by interlobular connective tissue. Within this connective tissue, there are three distinct types of blood vessels: an artery (top left), a bile duct (top center), and a vein (bottom center). The artery has a thick, muscular wall and a narrow lumen. The bile duct is lined by a simple cuboidal epithelium. The vein has a thin wall and a large, open lumen. The surrounding liver parenchyma consists of hepatocytes with visible nuclei and cytoplasm.

oDuctus biliaris

oVena
interlobularis

LOBULASI HEPAR

- ▶ Lobulus klasik/lobulus anatomis:
 - Pusat V. Centralis
 - Tepi: Triad Portal
- ▶ Lobulus Portal:
 - Pusat : triad portal
 - Tepi: garis imaginer yang menghubungkan 2 V centralis



Triad Portal

Lobulus anatomi

V. Centralis

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- ▶ Hepatic acini (Rappaport)=lobulus fungsional
 - Pusat: cabang terminal V. Porta & A. hepatica
 - Tepi: Parenchym hepar yang dapat darah dari pembuluh darah tersebut.Bentuk seperti pastel (belah ketupat)

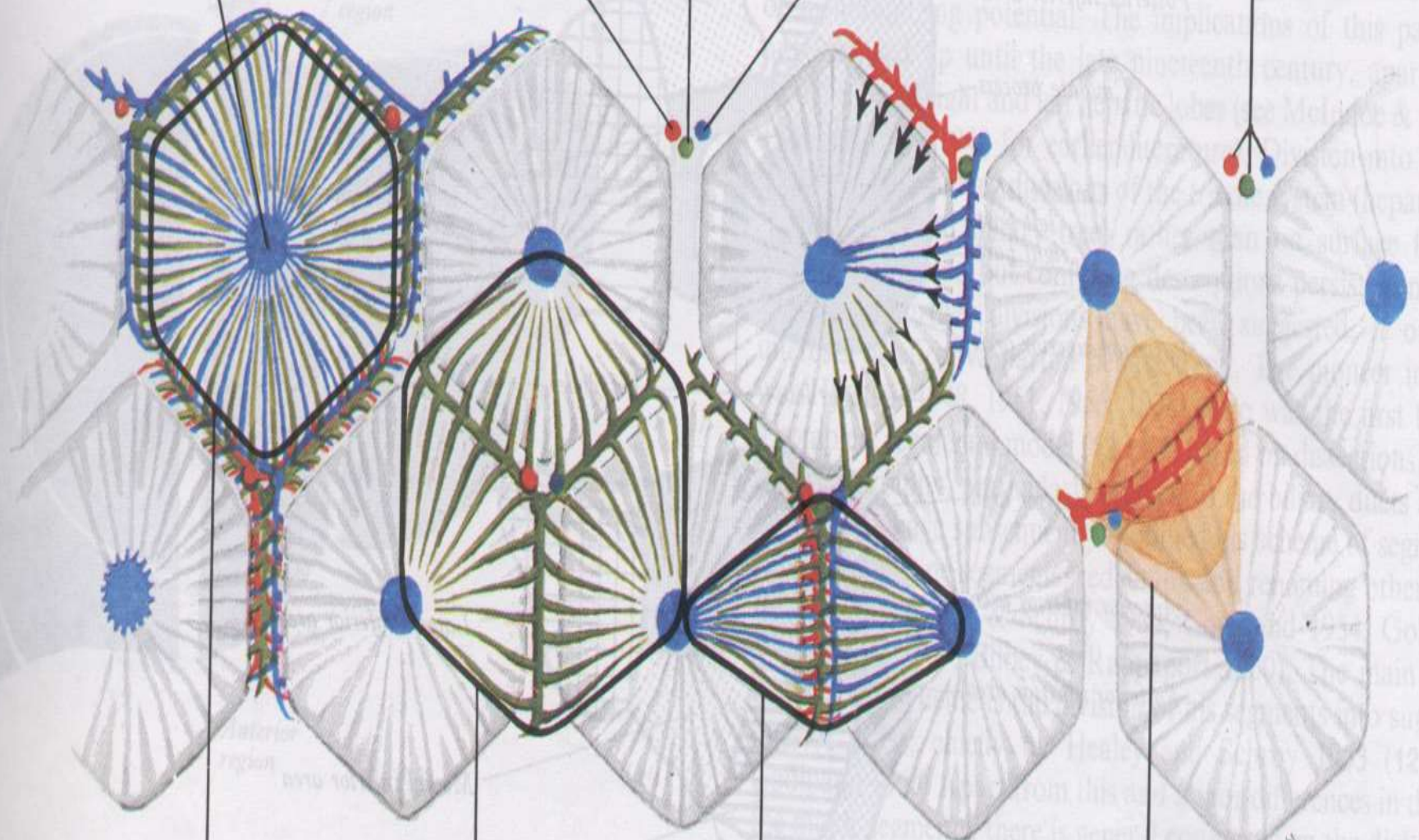
Central vein
(tributary of
hepatic vein)

Branch of
hepatic artery

Branch of
hepatic duct

Branch of
hepatic portal vein

Portal triad



HEPATIC LOBULE

PORTAL LOBULE
(compound acinus)


PORTAL ACINUS

Metabolic zonation within
portal acinus

Fungsi Hepatosit

- ▶ RER: sintesis dan sekresi protein serum (alb, mikro glob, transferin, dll)
- ▶ SER: biosintesis kolesterol, detoksifikasi obat dan racun, enzim → garam empedu.
- ▶ Lisosom: menghancurkan sel yg rusak
- ▶ Mitokondria: sintesis ATP
- ▶ Mikrobodi: metab. Alkohol, H_2O_2

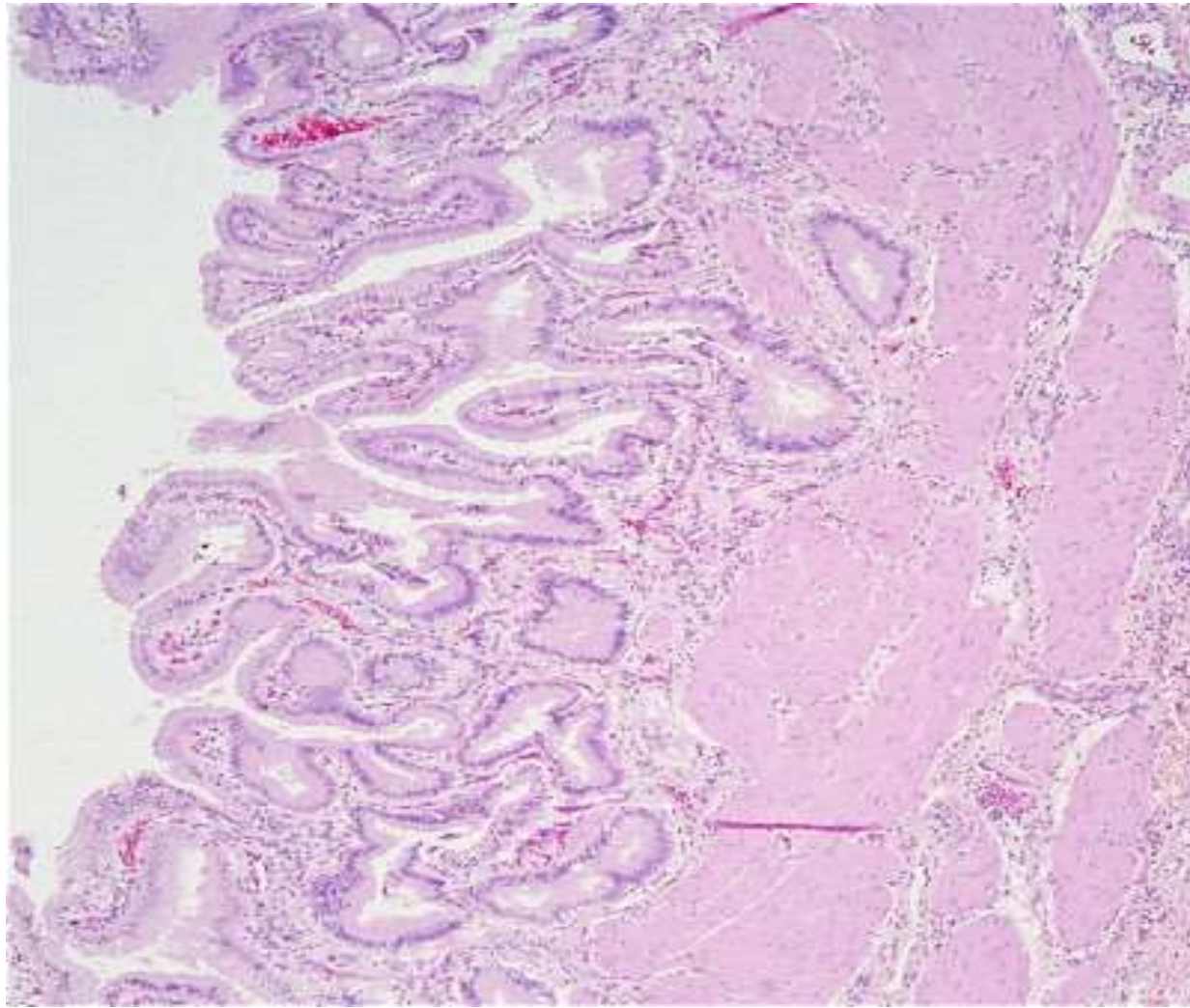
VESICA FELEA

- ▶ Bentuk: buah pear, berongga
 - ▶ Fundus, corpus, leher
 - ▶ Fungsi: memekatkan, menyimpan dan melepaskan empedu.
 - ▶ Saluran: ductus cysticus – bergabung dg ductus hepaticus communis – ductus choleduchus
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Dinding Vesica Felea

- ▶ Mucosa: Ep. Columnar simplex, lamina propria tipis (p.d >>)
- ▶ Muscularis: otot polos.
- ▶ Perimuscular: j.i kollagen, P.d dan saraf
- ▶ Serosa – peritoneum

Pada mucosa bisa didapatkan divertikel/sinus
Rokitansky Aschoff



Vesica felea

WASSALAM