

# Histology Team 431



## Leaders

Tamader Aloofy

Mohammed Aldaheri

## Members

Ibtihal Al-Amer

Nasser Alsaleh

Raghda Al Amri

Mosaed Aldekhayel

Walaa Al Shehri

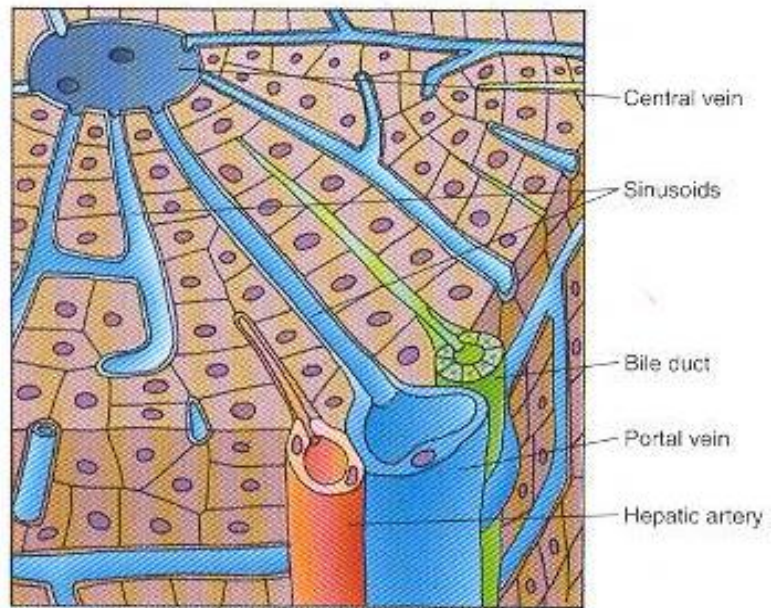
Abeer Al-Suwailem

Nouf Aboalsamh

## Biliary Passages

Intrahepatic passages:

- Bile canaliculi  
Between the hepatocytes has no own wall .
- Bile ductules (canals of Hering)  
When you start see epithelium.
- Interlobular bile ducts.  
Between lobules (portal area) also called bile ducts  
(Simple cuboidal epithelium)



Extrahepatic passages:

- Right & left Hepatic ducts.  
Collecting of all bile ducts
- Common hepatic duct.
- Common bile duct.  
Joining of common hepatic and cystic ducts

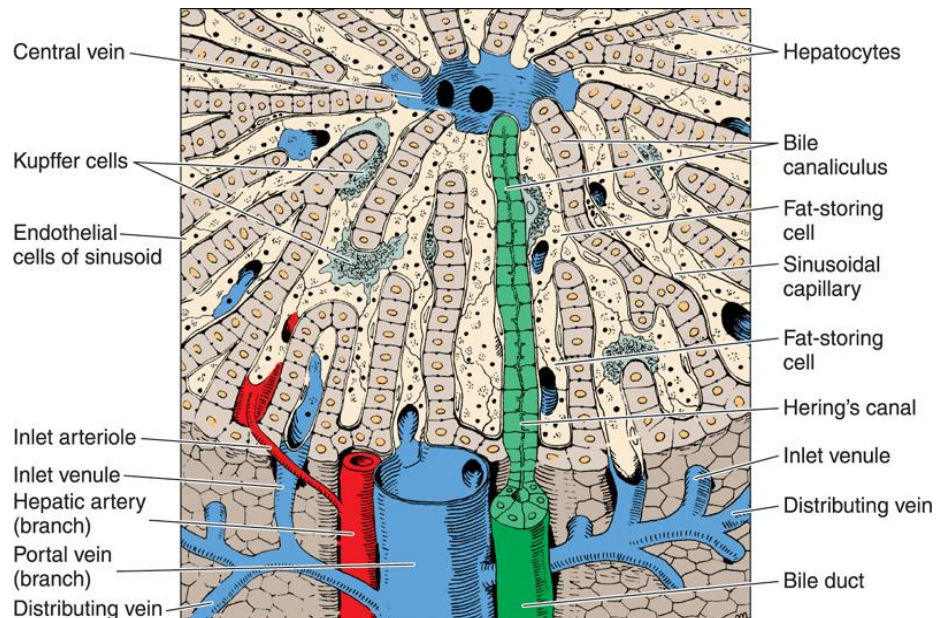
## Bile Canaliculi

Narrow channels located between hepatocytes, limited only by the cell membranes of 2 hepatocytes.

**They are the first portions of the bile duct system.**

Microvilli (for secretion) project from the hepatocyte into the bile canaliculi, thus increasing the surface area.

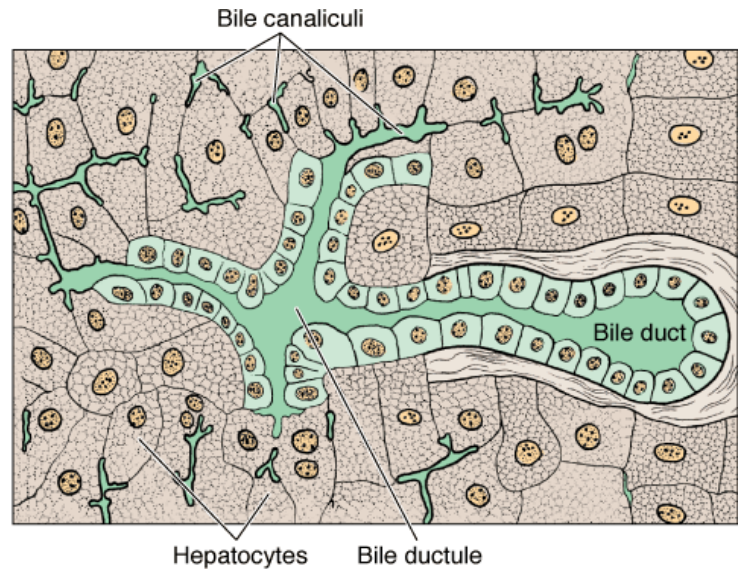
**Tight junctions** between the cell membranes of the 2 hepatocytes **prevent leakage of bile.**



## Bile Ductules (Canals of Hering)

Near the peripheral portal areas, bile canaliculi empty into **bile ductules** composed of **cuboidal epithelial cells** called **cholangiocytes**.

After a short distance, these ductules collect and end in the **interlobular bile ducts** in the portal areas.

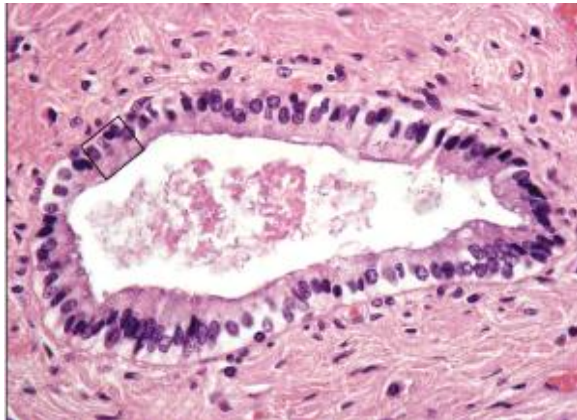


## Interlobular Bile Ducts

Are in the portal areas.

Lined by simple cuboidal epithelium (becomes simple columnar epithelium near the porta hepatis).

Interlobular bile ducts merge to form larger ducts, which eventually unite to form the right and left hepatic ducts.



## Common Hepatic Duct

Formed by union of the right & left hepatic ducts. It joins the cystic duct, arising from the gallbladder, forming the common bile duct.

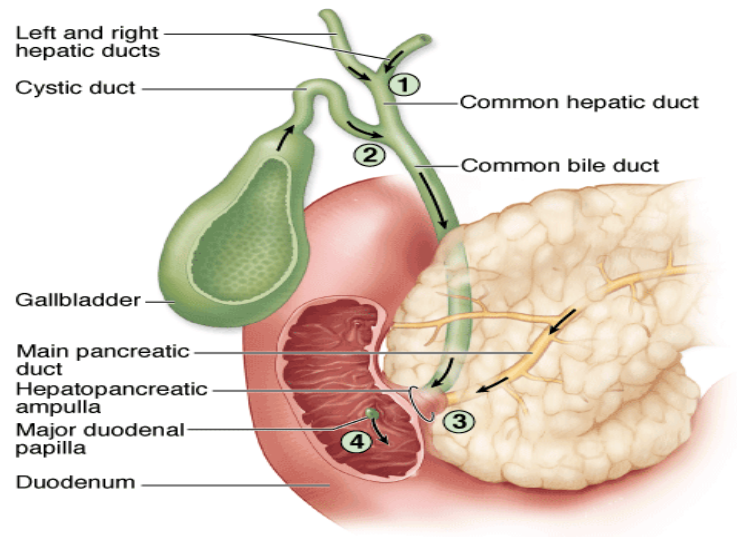
Similar in structure to the wall of gall bladder and other extrahepatic bile ducts.

**Mucosa:** Epithelium: Simple columnar.

**Lamina propria.**

**Muscularis:** bundles of smooth muscle fibers in **all directions**. **Not well developed**

**Adventitia.**



## GALL BLADDER

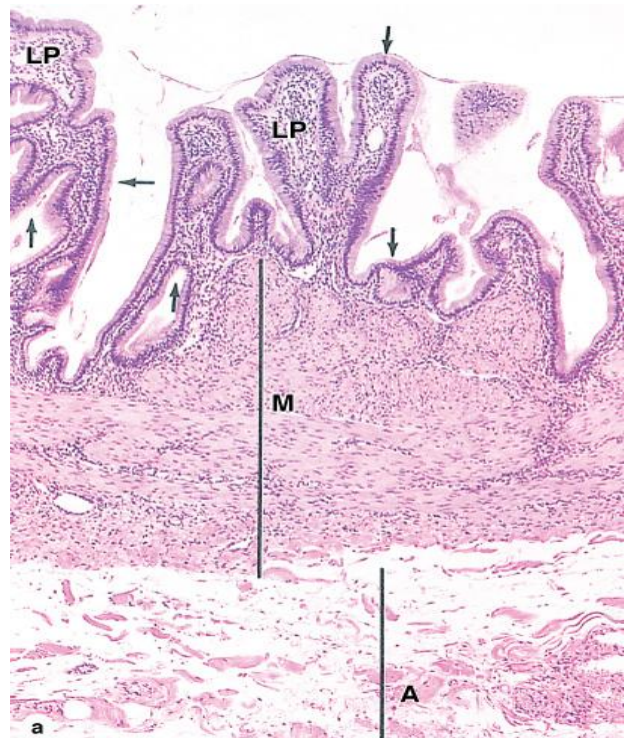
A saclike structure that stores, concentrates and releases bile. Its wall is formed of:

**Mucosa:** highly folded. Simple columnar epithelium. **NO GOBLET CELLS**

**Lamina propria:** contains mucous glands in the neck of gall bladder.

**Muscularis:** bundles of smooth muscle fibers oriented in all directions.

**Serosa (fundus) or adventitia.**



## Questions:

1-Which part of gall bladder is cover with peritoneum?

- a- Fundus
- b- Hindan part under liver
- c- All gall bladder

2-Bile canaliculi composed of

- a- Simple columnar
- b- Simple squamous
- c- Doesn't have its own wall

Answers : a,c