

# PORTOSYSTEMIC ANASTOMOSES

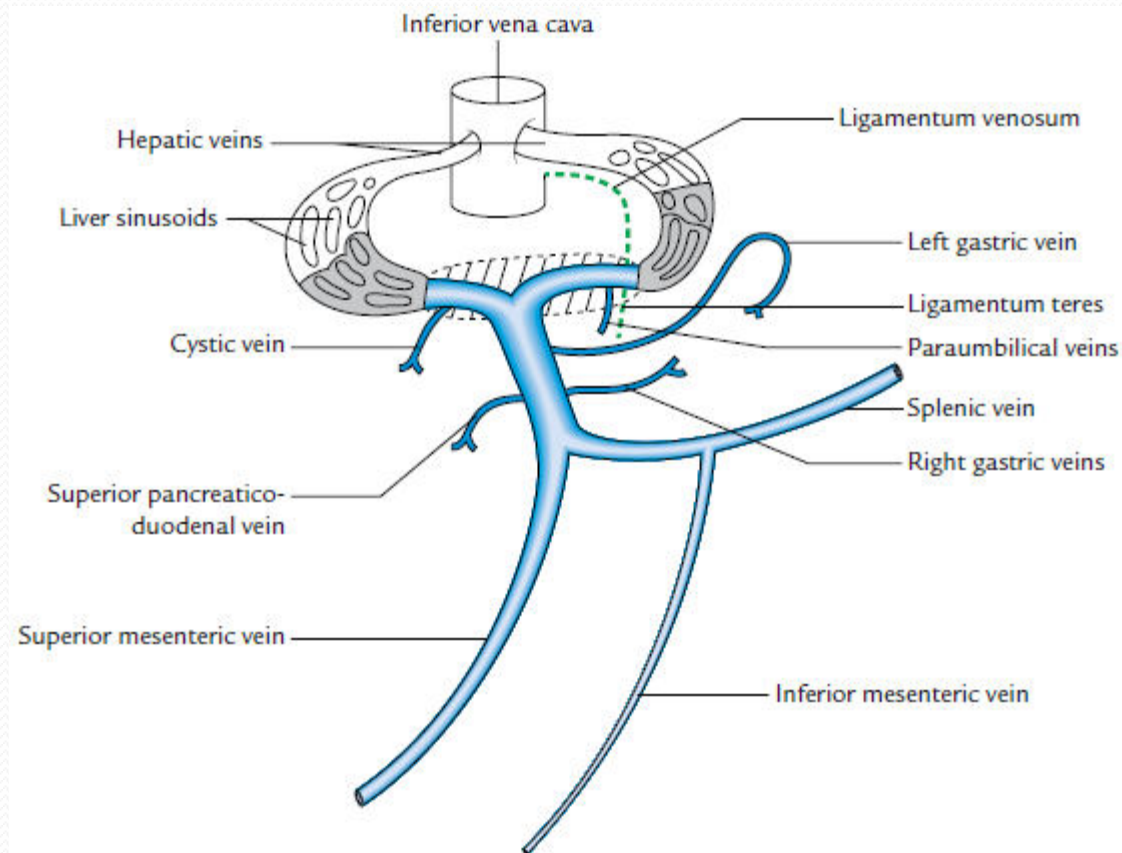
# PORTAL VEIN

- It provides 80% of blood that flow through liver
- Collects blood from abdominal and pelvic part of the alimentary tract, pancreas, spleen, gall bladder
- It transports products of digestion like carbohydrates, proteins from gut and products of RBC destruction from spleen

# FORMATION AND COURSE

- Formed from superior mesenteric vein and splenic vein at L2 level
- Ascends upwards behind the neck of pancreas
- Ends at the right end of porta hepatis by dividing into right and left branch
- Inside the liver the blood is drained into hepatic sinusoids from there drained by hepatic vein into IVC

# FORMATION



# TRIBUTERIES

- Superior pancreaticoduodenal veins
- Right gastric vein which is connected to the prepyloric vein
- Left gastric vein connected to the oesophageal veins at the lower end of oesophagus
- Cystic vein
- Paraumbilical veins that run along the ligamentum teres

# PORTOSYSTEMIC ANASTOMOSES

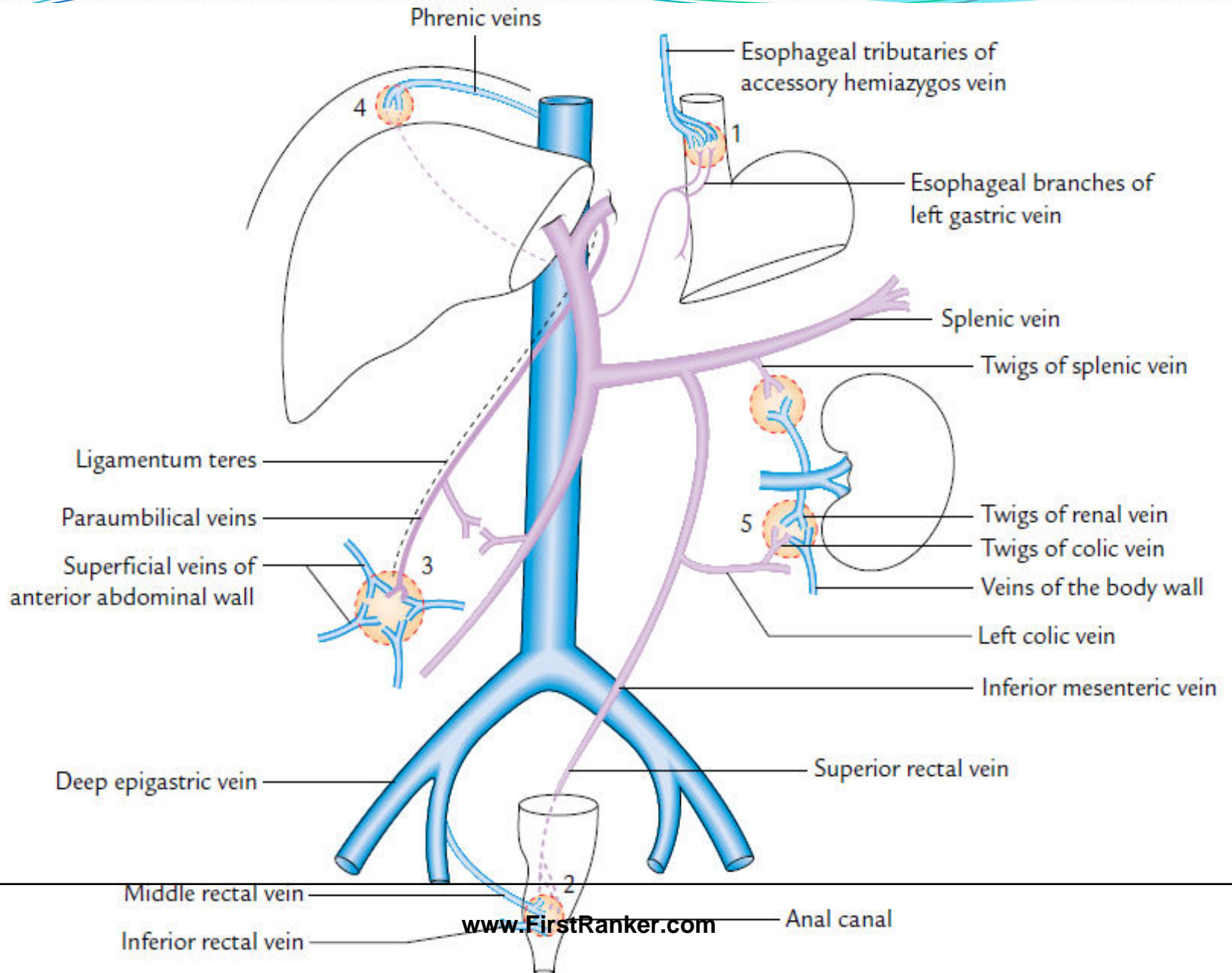
- These are anastomoses that occur between portal vein and systemic venous system
- It acts as collateral circulation in case of portal obstruction

# SITES

- UMBILICUS-Left gastric vein communicates with superficial abdominal veins around the umbilicus through paraumbilical veins. In Obstruction superficial veins around umbilicus become tortuous and distended known as caput medusae
- LOWER END OF OESOPHAGUS-Oesophageal tributaries of left gastric vein anastomose with oesophageal tributaries of accessory hemiazygos vein

- ANAL CANAL-Superior rectal vein anastomoses with middle and inferior rectal veins, the tributaries of internal iliac vein.
- EXTRA PERITONEAL SURFACE OF RETROPERITONAL ORGANS-Veins of retroperitoneal organs such as duodenum, ascending colon, and descending colon anastomose with the retroperitoneal veins of the posterior abdominal wall and renal capsule
- BARE AREA OF LIVER-Here the hepatic venules anastomose with phrenic and intercostal veins.





# THANK YOU