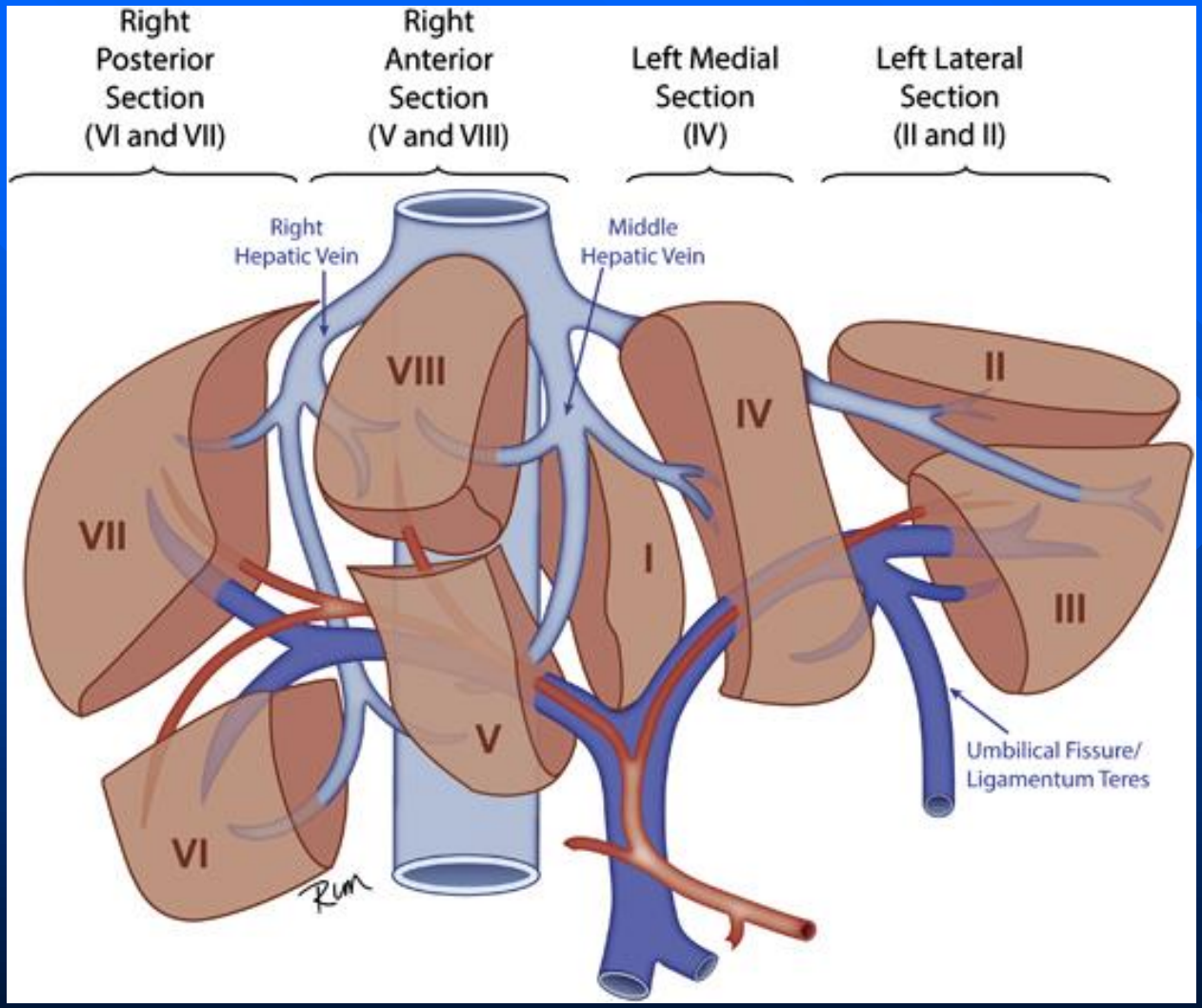
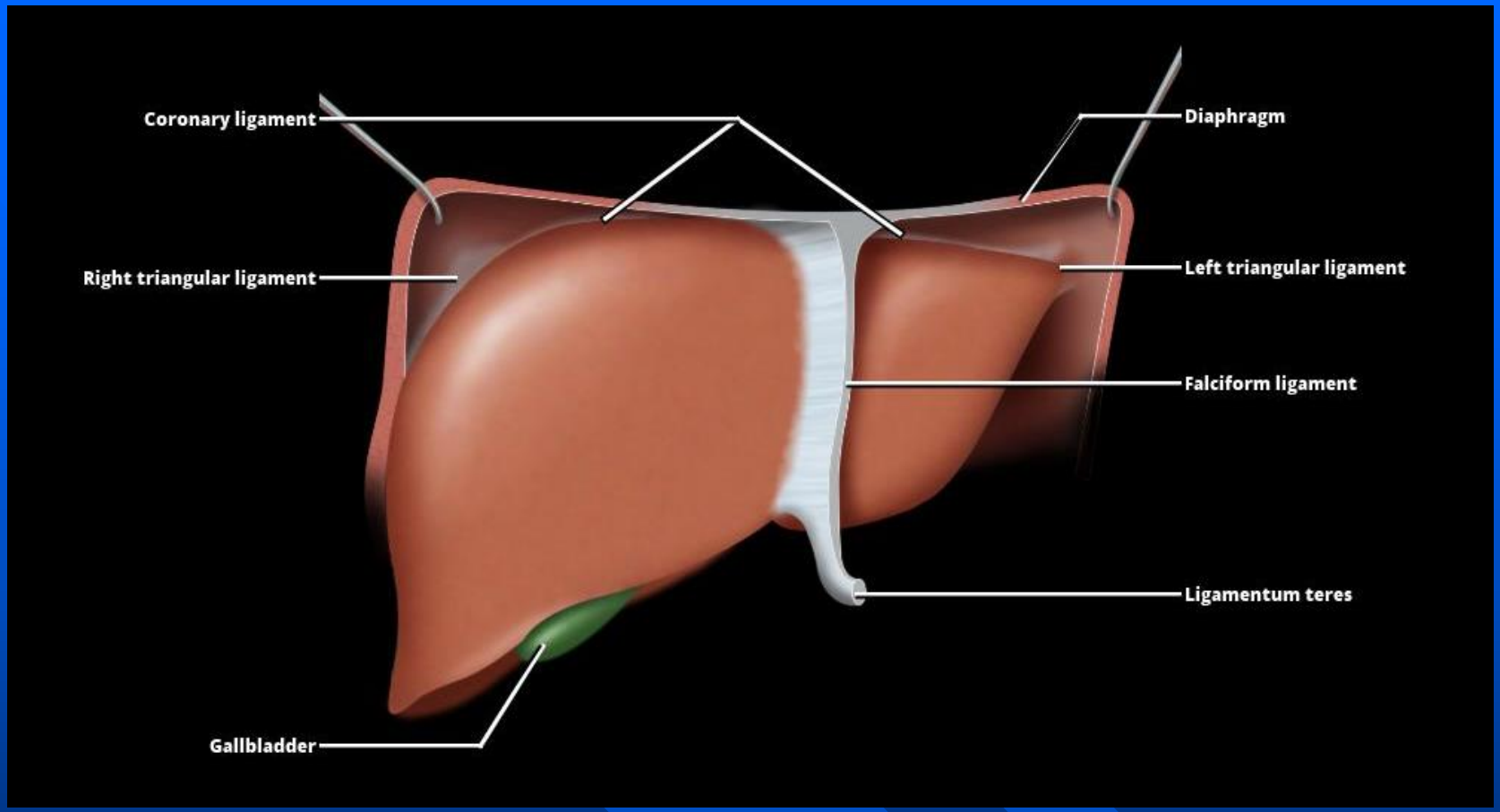
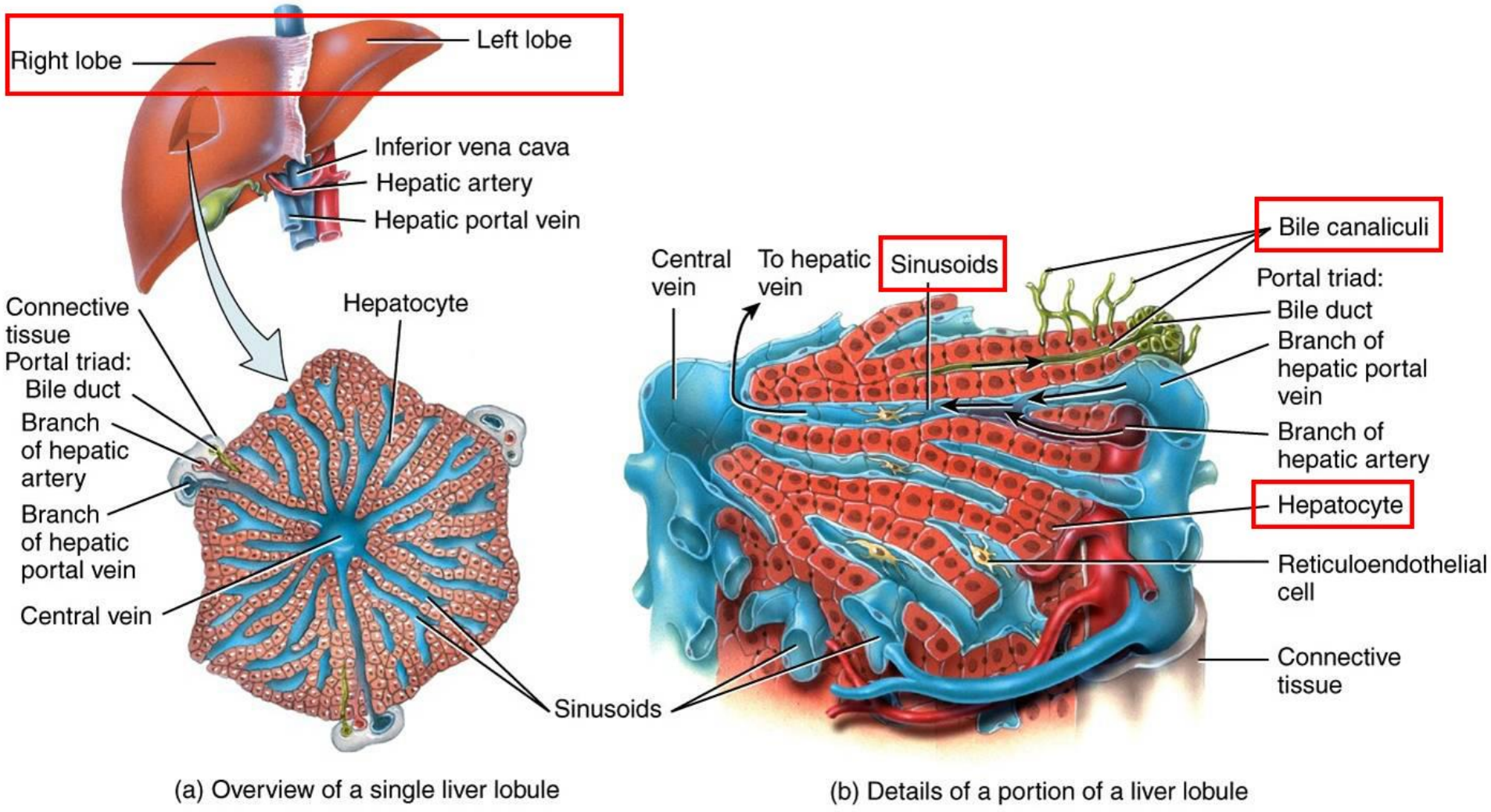
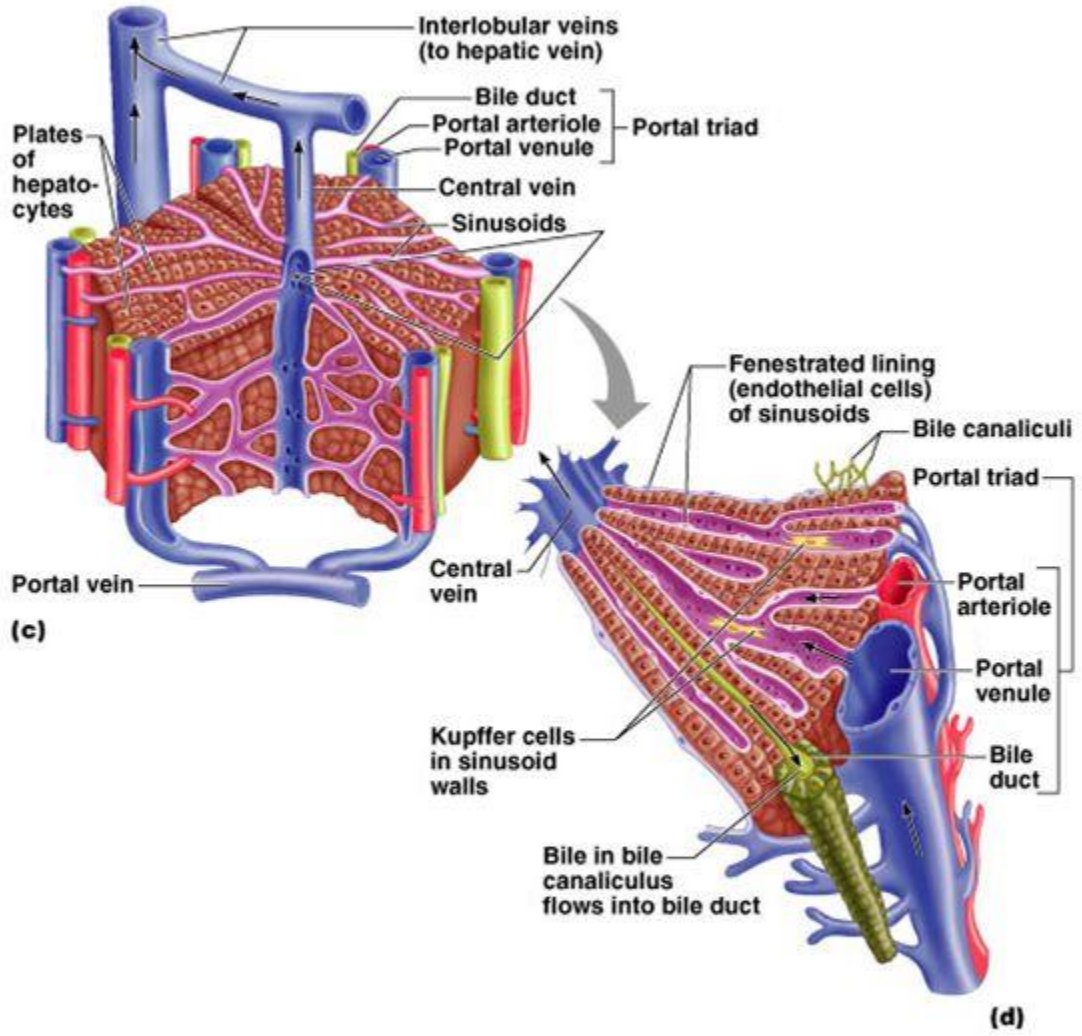

Right Posterior Section (VI and VII)
Right Anterior Section (V and VIII)
Left Medial Section (IV)
Left Lateral Section (II and II)
Right Hepatic Vein
Middle Hepatic Vein
VIII
IV
II
VII
I
III
V
VI
Umbilical Fissure/ Ligamentum Teres

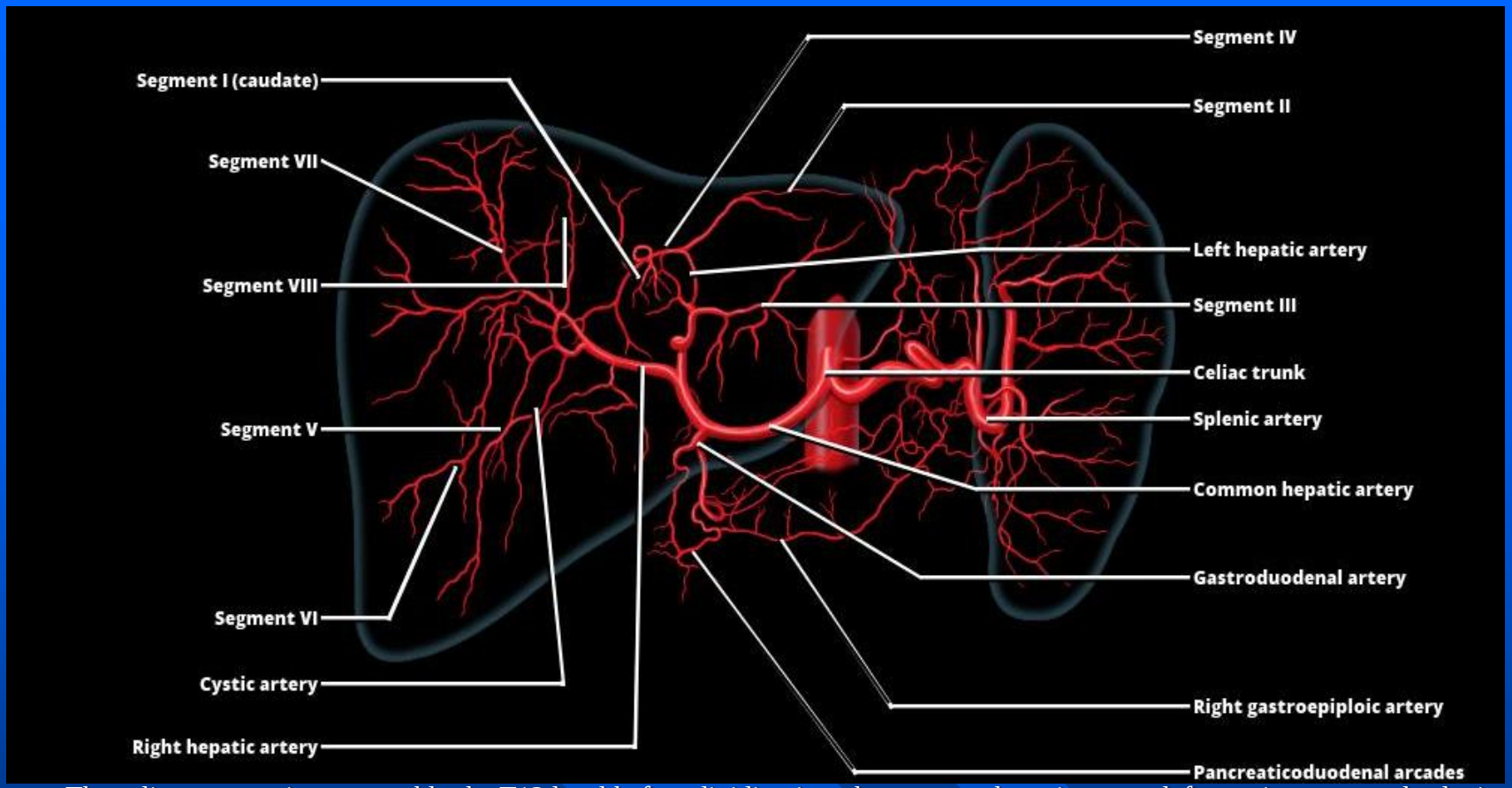


- The anterior surface of the liver is smooth and molds to the diaphragm and anterior abdominal wall.
- Generally, only the anterior/inferior edge of the liver is palpable on physical exam.
- The liver is covered with peritoneum, except for the gallbladder bed, porta hepatis, and the bare area.
- Peritoneal reflections form various ligaments that connect the liver to the diaphragm and abdominal wall, including the falciform ligament, the inferior edge of which contains the ligamentum teres, the obliterated remnant of the umbilical vein.



- ***Portal triad***
  - Portal arteriole
  - Portal venule
    - Branch of hepatic portal vein
    - Delivers substances from intestines for processing by hepatocytes
  - Bile duct
    - Carries bile away
- ***Liver sinusoids***
  - Large capillaries between plates of hepatocytes
  - Contribute to central vein and ultimately to hepatic veins and IVC
- ***Kupffer cells***
  - Liver macrophages
  - Old blood cells and microorganisms removed





- The celiac artery arises at roughly the T12 level before dividing into the common hepatic artery, left gastric artery, and splenic artery.
- The common hepatic artery gives off the gastroduodenal artery inferiorly and becomes the proper hepatic artery, which then divides into the right and left hepatic arteries at the liver hilum.
- The left hepatic artery courses superiorly and slightly to the left before giving off branches to segments II-IV.
- In some instances, the segment IV artery may arise directly from the proper hepatic artery and is then termed the middle hepatic artery.
- The right hepatic artery divides into anterior and posterior branches, which take a upward vertical course and horizontal course, respectively.
- The anterior branch gives off arteries supplying segments V and VIII, while the posterior branches supplies segments VI and VII. Segment I (caudate) is typically supplied by small branches of the right or left hepatic arteries (or both).