SONOGRAPHER'S

QUICK REFERENCE GUIDE

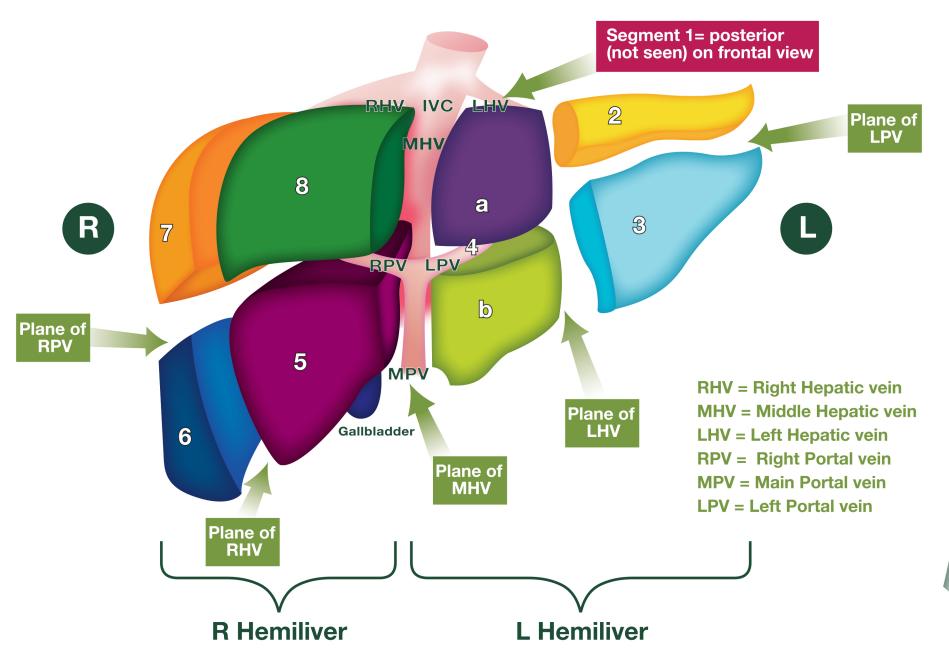
FRONTAL VIEW

Frontal view of liver rotated 30 degrees to the left to

demonstrate the posterior segments of the right hemiliver (segments 6 and 7).

On a normal frontal view the right border of the liver is formed by segments 5 and 8,

with segments 6 and 7 located posterior to these respectively - see cross sectional images.



Segments

Segment 1 - Caudate lobe, also called Spigel lobe.

This is posterior and separated by ligamentum venosum

Segment 2 - Lateral superior segment of Left Hemiliver

Segment 3 - Lateral inferior segment of Left Hemiliver

Segment 4 - Quadrate lobe - medial segment of left hemiliver

- further divided into subsegments 4a and 4b by the portal vein
 - 4a superior segment

- 4b - inferior segment

Segment 5 - Anterior inferior segment of right hemiliver

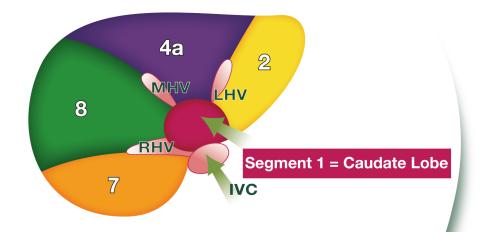
Segment 6 - Posterior inferior segment of right hemiliver

Segment 7 - Posterior superior segment of right hemiliver
 Segment 8 - Anterior superior segment of right hemiliver

Planes

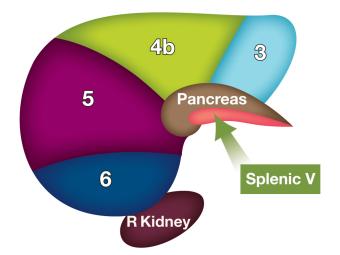
- Plane of RHV divides anterior and posterior segments of right hemiliver
- Plane of MHV divides right and left hemilivers superiorly. Inferiorly, the main lobar fissure and Cantlie's line continue to divide the right and left hemilivers
- Main lobar fissure runs between RPV and the gall bladder
- Cantlie's line is an imaginary line drawn from the gall bladder fossa to the IVC
 - Plane of LHV separates the medial and lateral segments of the left hemiliver superiorly
 - Inferiorly, the ligamentum teres and falciform ligament separate these segments

CROSS SECTIONAL IMAGES



Superior to the level of the Left Portal Vein

 demonstrates superior segments and caudate lobe (segment 1) posteriorly



Level of the Splenic Vein

- only inferior segments are seen



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Reference: Couinaud, C: Le Foie. Etudes anatomiques et chirurgicates. Paris, Masson, 1957 pp 284-289. Couinaud, C: Liver Anatomy: portal (and suprahepatic) or biliary segmentation. Digestive surgery, 1999: 16: 459-467. Hardy, D: Segmental Liver Anatomy - A Summary. Sound Effects, Dec 2001.

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