

Falciform lig - Remnant of ventral mesentery.
↳ oblique umbilical vein ^{in assemblage}

Date _____

Page _____

LIVER:

- Features :
- liver is large and solid gland
 - Situated in Right upper quadrant of Abdominal cavity.
 - Secrets bile and perform various metabolic function.

Location: Right hypochondrium
Greater part in epigastrium
extend into left hypochondrium.

External feature: wedge shape - 1.4-1.8 kg

5 surface: Ant, Post, Sup, Inf, Right lateral

One prominent border: Inf border -

- separates the diaphragmatic / Ant surface from Inf surf
- Rounded laterally separates Right lat & Inf
- Notches:
 - cystic notch → fender of G.B
 - ligamentum teres →

- lies in transpyloric plane

Two lobes

→ Right
→ left

lobes by

Falciform

(Ant of superior)

tissue for lig - Inf

tissue for lig - Post-venosum

RIGHT LOBE:

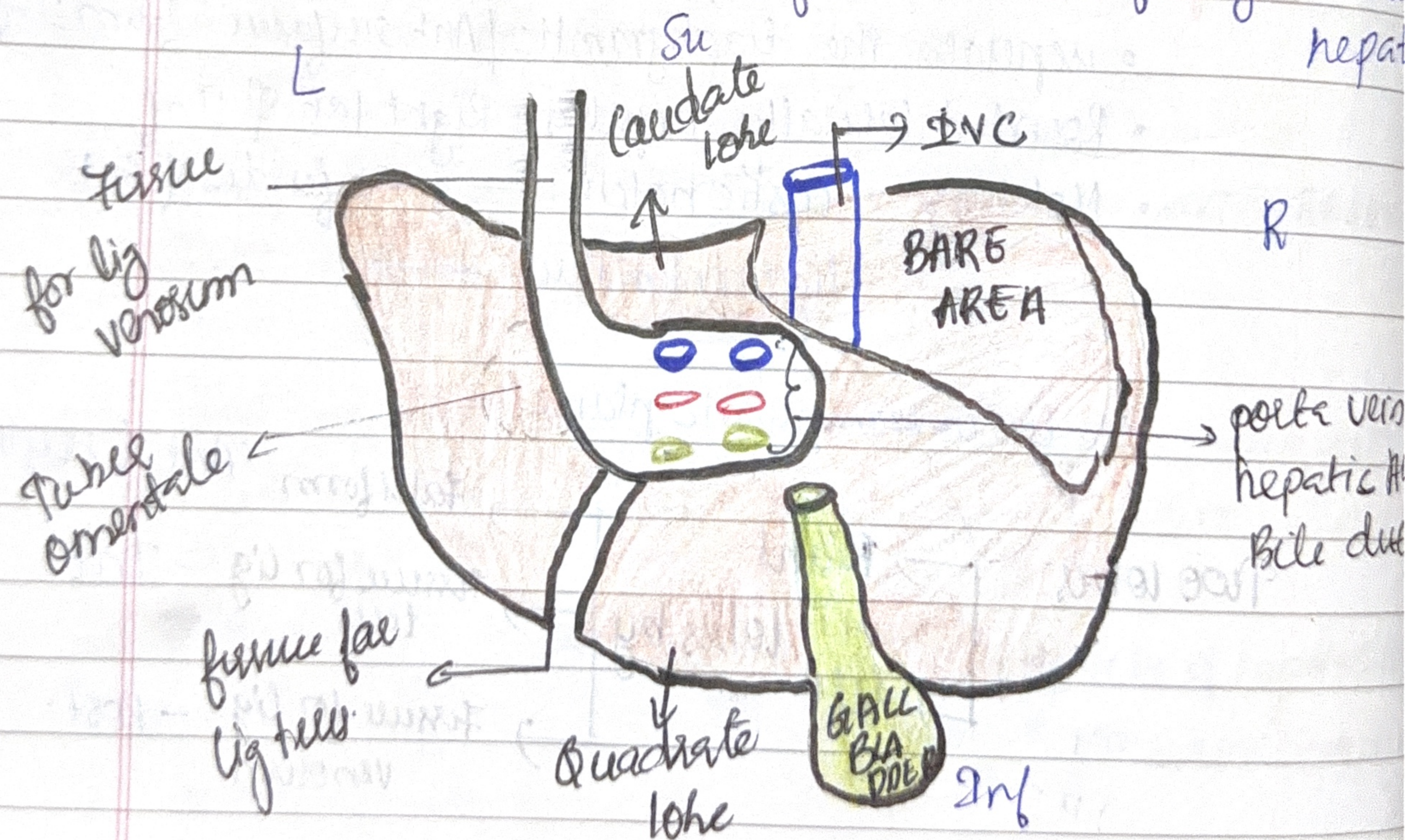
- larger than left lobe (6 times)
- Present caudate & Quadrate lobe

Caudate lobe — situated on Post surface

Bounded → Right : Groove for IV
left : fisure for lig v
Inf : porta hepatis

Quadrate lobe: — situated on Inf surface

Bounded → Ant: Inf border
sup/post - Porta hepatis
Right - gall bladder
left - fisure for lig mlt hep



Porta hepatis : Deep transverse fissure 5cm long
situated on - Inf surf Above Right lobe
of liver

• lie b/w caudate lobe Above of quadrate lobe
below

• Portal vein, hepatic Artery, hepatic nerve } enter
Right & left hepatic duct leave it.

⇒ left lobe → smaller than Right lobe

LIGAMENTS OF LIVER:

2 types
false true:

False ligament : They are peritoneal fold:

Falciform lig : sickle shaped fold of peritoneum
connect the liver to undersurface of diaphragm
to Ant Abdominal wall.

Coronary lig : A fold of peritoneum connecting - base to
Area diaphragm

consist of two layers upper & lower.

peritoneal reflection of caudate lobe

Right side
Left side
upper
lower

Date _____
Page _____
Right triangular lig: small triangular fold of peritoneum which connects Right lat surf of liver to diaphragm
• enclose the Apex of bare Area

Left triangular lig: small triangle fold of peritoneum connect upper surface of liver to diaphragm

Lesser omentum: fold of peritoneum connecting lesser curv of stomach

↓ to
visceral surface of liver

- hepatic Attachment is inverted L type
- Vertical line → furrow of lig venosum
- Horizontal line → porta hepatis.

TRUE LIGAMENTS: They are Remnants of fetal structures

- **Ligamentum teres hepatis:** Remnant of left embryonic vein
- **Ligamentum venosum:**
 - Remnant of ductus venosus
 - on fetal left connects left Br of Portal vein of IVC
 - posterior Anastomosis

RELATIONS:

Pleitoneal Relations : Most of liver is covered by Peritoneum

Area not covered by Peritoneum are as follows:

o Triangular bare Area : On the post surface of Right
limited by sup of Inf lobe of CL

o Groove for IVC : Post surface of R.L

o Fossa of GB : On the inf surface of R.L

o Area of attachment of L.O.

VISERAL RELATION:

Ant surface: Related to xiphoid process.

o Diaphragm on each side

separate pleura -

Above the level of
line drawn from
xiphoid end gone to
10th Rib in Mid
Axillary line

Lungs Above level
of line from
same 10th Rib
joint

Post surface is triangular / sup part.

- Base Area → Right suprarenal gland
- Groove for IVC - upper part of vena
- caudate lobe: crus of diaphragm
- Fissure for lig venosum: contain two layers of L.O
- Post surface of left lobe: orophaged impression

Inf surfaces

Inf surface of the left lobe → Related to the Antero-
sup surface of the stomach peduncle → Gastric Impression

⇒ slight elevation → when less O comes in contact with light
is called tubercle omentale.

Inf surface of the Right lobe - quadrate lobe, fovea
of Gall. B & porta hepatis.

① Quadrate lobe: → Related to pylorus & 1st part
of duodenum.

② Fossa of G.B — lie → Right of Quadrate lobe
occupied by G.B.

③ Porta hepatis — Refee (back)

(d) Fissure for lig tunc : deep cleft to left of quadrate lobe

(e) Right kidney : Related to inf sup, post to the colic impression & to Right of duodenal impression & lower Renal Impression

(f) Right colic flexure : Related to inf surface of G.B.

(g) junction of 1st & 2nd part of duodenum : → fovea of G.B

Right surface: convex

Related to opp. diaphragm opp 7th to 10th Ribs in midaxillary line

• Diaphragm separates
→ pleura up to 10th Rib
→ lungs up to 8th Rib

Sup surface:

⇒ concave or mudda due to central tendon of diaphragm which sep it from pericardium → cardiac impression.

⇒ convex: Right & left parts fit into domes of diaphragm

BLOOD SUPPLY:

Liver is highly vascular

⇒ Receive blood from 2 sources
→ Arterial Blood → Hepatic artery (20%)
→ Venous Blood → Portal vein (80%)

VENOUS DRAINAGE: by 3 types of hepatic veins

→ left
middle
Right } Hepatic vein

- Page _____
- 3 vein may enter IVC independently
 - But left & middle vein usually join, so that only two major vein join in IVC

NERVE SUPPLY

Symp fibres $\xrightarrow{\text{derived}}$ coeliac plexus

Runs along the L.O & enter Porta hep

Parasymp fibres $\xrightarrow{\text{derived}}$ hepatic branch of Ant vagal trunk

- o Reach porta hepatic through L.O

HEPATIC SEGMENTS: Structural unit of liver

Right lobe $\rightarrow$ divided into $\begin{cases} \text{Ant} \\ \text{Post} \end{cases}$ Part

Left lobe $\rightarrow$ divided into $\begin{cases} \text{Medial} \\ \text{Lateral} \end{cases}$ Part

- o each of these part further divided into upper & lower part
- o vein draining the hepatic segment of entire segment
 $\rightarrow$ They drain more than one segment.