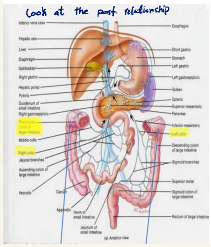
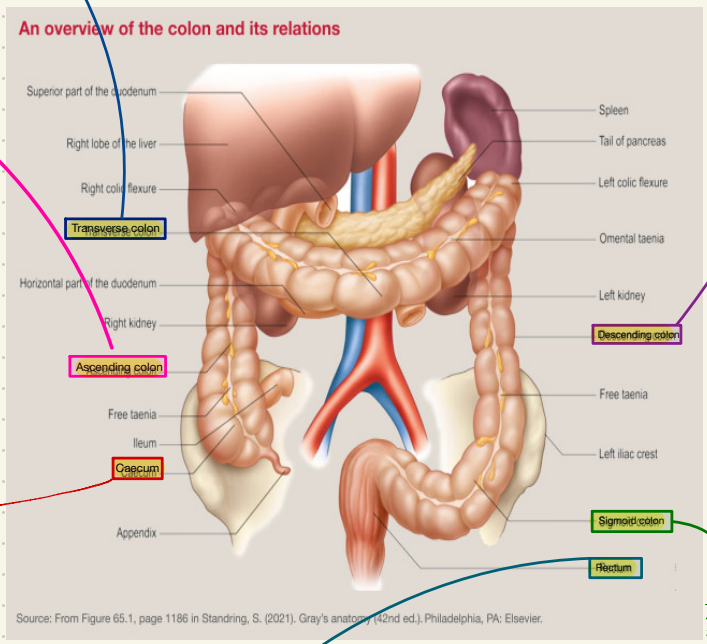


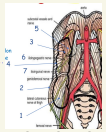
*Ant:-
1. The greater omentum
2. Anterior abdominal wall (umbilical & hypogastric)

*post:-
1. 2nd part of duodenum
2. The head of pancreas
3. The coils of jejunum & ileum



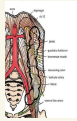
*Ant:-
1. coils of small intestine -ileum
2. The greater omentum
3. Anterior abdominal wall

*post:-
1. The iliacus
2. Iliac crest
3. The quadratus lumborum
4. origin of transversus abdominis m.
5. lower pole of Rt kidney
6. iliohypogastric N.
7. ilioinguinal N.



*Ant:-
1. coils of small intestine -jejunum
2. The greater omentum
3. Anterior abdominal wall

*post:-
1. Lateral border of Lt kidney
2. Origin of transversus abdominis m.
3. The quadratus lumborum
4. iliac crest
5. iliacus
6. Lt psoas
7. L2 (iliohypogastric + ilioinguinal)
8. Lateral cutaneous N. of the thigh
9. The femoral N.



*Ant:-
1. coils of small intestine -ileum
2. The greater omentum
3. Anterior abdominal wall in the Rt iliac region

*post:-
1. iliopsoas muscle (iliacus + psoas)
2. Femoral N
3. lateral cutaneous N. of the thigh

*Medial:
1. small intestine (ileum)

*postero-medially:
1. appendix
2. External iliac vessels

*left:
1. Lt External iliac vessels
2. Lateral wall of pelvis
3. psoas, ureters or ovary

*Right:
1. small intestine -ileum mostly

*SUP:-
1. coils of small intestine -ileal fold-

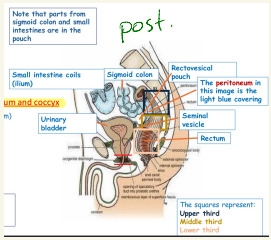
*Inf:-
in Male: urinary bladder
in female: uterus

*Ant. :-

- in male:
  - upper 2/3 of the rectum
    1. The sigmoid colon
    2. coils of ileum that occupy the rectovesical pouch
  - Lower 1/3 of the rectum:
    1. post. surface of the bladder
    2. The termination of vas deferens
    3. The seminal vesicle on each side
    4. The prostate (superiorly)

- in female:
  - upper 2/3 of the rectum
    1. The sigmoid colon
    2. coils of ileum that occupy the rectouterine pouch
  - Lower 1/3 of the rectum
    1. The post. surface of the vagina

*post:-
1. The rectum
2. The sacrum
3. The lower coils of the terminal part of ileum
4. Sacral plexus
5. Lt piriformis muscle
6. Lt External iliac vessels
7. Lt ureter
8. Lt internal iliac A.

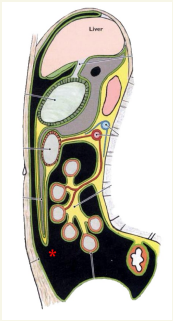


*post.:-
1. in contact with sacrum & coccyx
2. The piriformis muscle
3. Coccygeus muscle
4. Levatoris ani muscle
5. The sacral plexus
6. The sympathetic trunks

Lesser sac walls:

*superior
1. peritoneum which cover the caudat lobe of Liver & diaphragm

*Ant:
1. Lesser omentum
2. peritoneum of posterior wall of stomach
3. Ant. two layers of greater omentum



*inferior
1. conjunctive area of Ant & post. two layers of greater omentum

*post:
1. post. two layers of greater omentum
2. transverse colon
3. transverse mesocolon
4. peritoneum covering post. abdominal wall

*Left
1. spleen
2. gastrosplenic leg.
3. splenorenal leg.

*Right
1. epiploic foramen

Epiploic Foramen

Pay close attention to the boundaries, the doctor said there are lots of questions on this topic

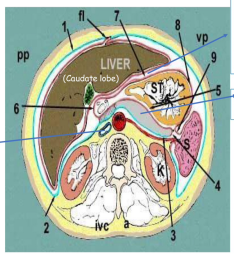
Boundaries

*Anteriorly
- Free border of lesser omentum (doctor said lesser sac)
(labelled 6 on the image) contains:
1- Bile duct (Rt & ant)
2- Hepatic artery (Lt & anT)
3- Portal vein (post.)

*Posteriorly
IVC (inferior vena cava)

*Superiorly
Caudate process of caudate lobe of liver

*Inferiorly
First part of duodenum



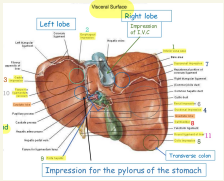
Epiploic foramen passes behind the stomach

Lesser sac

* relation of the liver :

- it has 5 surfaces :
* postero-inferior surface (visceral surface)

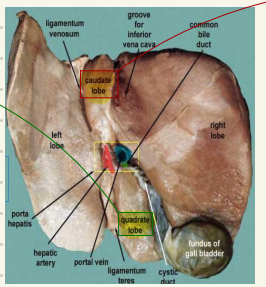
1. inferior venea cava I.V.C
2. The Esophagus
3. The stomach
4. The duodenum
5. Rt colic Flexure
6. Rt Kidney
7. Rt suprarenal gland
8. Gallbladder
9. porta hepatis
10. Fissure of ligamentum venosum
8. lesser omentum Tubular omentum
11. leg. teres



* superior surface:
1. Diaphragm (Dome shape)
2. pleura & Lung
3. pericardium & heart

* posterior surface.
1. Diaphragm ONLY

* Anterior surface:
1. Diaphragm
2. Rt & Lt Pleura & Lung
3. Costal cartilage (6-9 rib)
4. xiphoid process
5. Ant. abdominal wall



Ant: Ant. margin of Liver
Sup: porta hepatis
Rt: fossa for gallbladder
Lt: Fossa for leg. teres

Inf. porta hepatis
Rt: Fossa for I.V.C.
Lt Fossa for leg venosum

Structure of GB

Fundus
-Ant:ant.abdominal wall
- Post.inf: transverscolon
Body
sup: liver
post.inf: Tr.colon. End of 1st part of doudenum , begins of 2nd part of doudenum
Neck
- Form the cystic duct, 4cm

Dependent cavity downwards,when their secretion stays for along time in the Hartmann's Pouch it will cassez single stone.

Hartmann's Pouch
1. Lies between body and neck of gallbladder
2. A normal variation
3. May obscure cystic duct
4. If very large, may see cystic duct arising from pouch

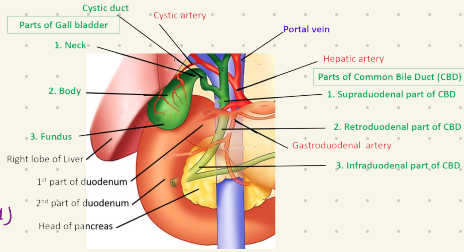
Hartmann's Pouch
Small pouch arises from the gallbladder neck, because it's a pouch and at the beginning of cystic duct at the gallbladderneck so stonez formation may arise but as single stone, and in such case should be surgically removed.

* Bile duct relations:

*1st part
- infront of epiploic opening
- Rt to hepatic A. & portal V.

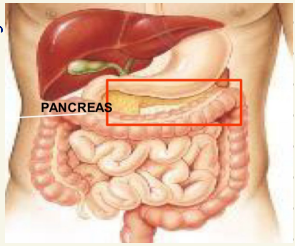
*2nd part:
- Behind the 1st part of duodenum
- Rt to gastroduodenal A.

* 3rd part:
- posterior surface of the head of pancreas (It pierces the head)
- contact with the main pancreatic duct.
Related with I.V.C., gastroduodenal A. & portal V.



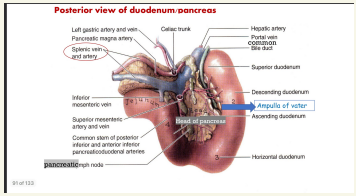
* Ant. relation of pancreas

1. Transverse colon
2. Transverse mesocolon
3. Lesser sac
4. stomach



* post. relation of pancreas

1. Bile duct & portal V.
2. splenic V.
3. I.V.C.
4. Aorta
5. Origin of sup. mesenteric A.. (behind the body of pancreas)
6. Lt psoas muscle
7. Lt suprarenal gland
8. Lt kidney
9. Hilum of the spleen



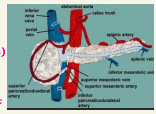
* The previous relationship was in General. Now let's present the details

- has 3 surfaces & 2 borders: Ant. post. & inf.

-The surfaces:

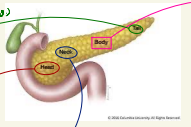
- Ant. surface:
1. Covered by peritoneum of post. wall of lesser sac
2. tuber omentale where the Ant. surface of pancreas join the neck.

- post. surface in contact with:
1. The aorta
2. The splenic V.
3. Lt kidney & Rt vessels
4. Lt suprarenal gland
5. origin of sup. mesenteric A (most imp)
6. The crura of diaphragm



- inf. surface:
- narrow on the Rt, broader on the Lt
- Covered by peritoneum of greater omentum
- Lies upon the duodenojejunal flexure & some coils of jejunum
- Its Lt extremity rest on Lt colic flexure

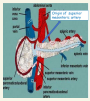
-infront of the splenicorenal leg (Lt renal vein) & come in contact with the hilum of the spleen



-Lie within the concavity of the duodenum

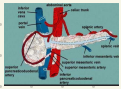
-a part of the head extends to the Lt behind the sup mesenteric vessels & Art to duodo is called The uncinate process

-It lies infront of the beginning of the portal vein



-The Borders:

* sup border in relation with:
1. The celiac A
2. The hepatic A
3. The splenic A (It runs toward the Lt in a groove)



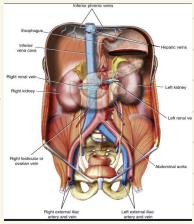
* Ant. border
- Along this border the two layers of transverse mesocolon diverge (one upward over the Ant. surface & one backward over the inf. surface)

* inf border
- Separate the post from the inf surface.
- The sup mesenteric vessels emerge under its Rt extremity

* Relation of I.V.C:

* Ant:
1. coils of small intestine
2. 1st & 3rd part of duodenum
3. Head of pancreas & common bile duct
4. I.V.C form the post. border of foramen of winslow
5. portal vein

-It lies in the deep groove of liver

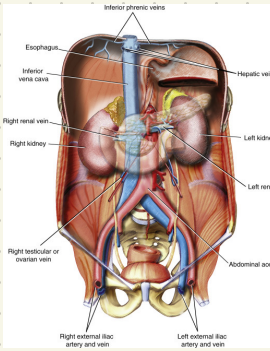


* Relation of abdominal aorta:-

* Ant:-
1. pancreas
2. coils of small intestine
3. 3rd part of duodenum
4. crossed by Lt renal V.

* Right:-
1. I.V.C
2. The cisterna chyli & beginnig of thoracic duct
3. The beginning of azygos V.

* Left:-
1. The Lt sympathatic trunk (chain)



Note the relations: of post. abdominal wall:
-Medially: Psoas major and psoas minor
-Laterally: Quadratus lumborum and transversus abdominis
-Inferiorly: iliacus muscle
-Superiorly: the diaphragm

* Relation of anal canal

*Ant:

-in male:
1. perineal body
2. membrenous urethra
3. bulb of penis

-in female
1. lower end of the vagina

* post.:
1. anococcygeal leg.
2. tip of the coccyx

* Lateral:-
1. ischiorectal fossa