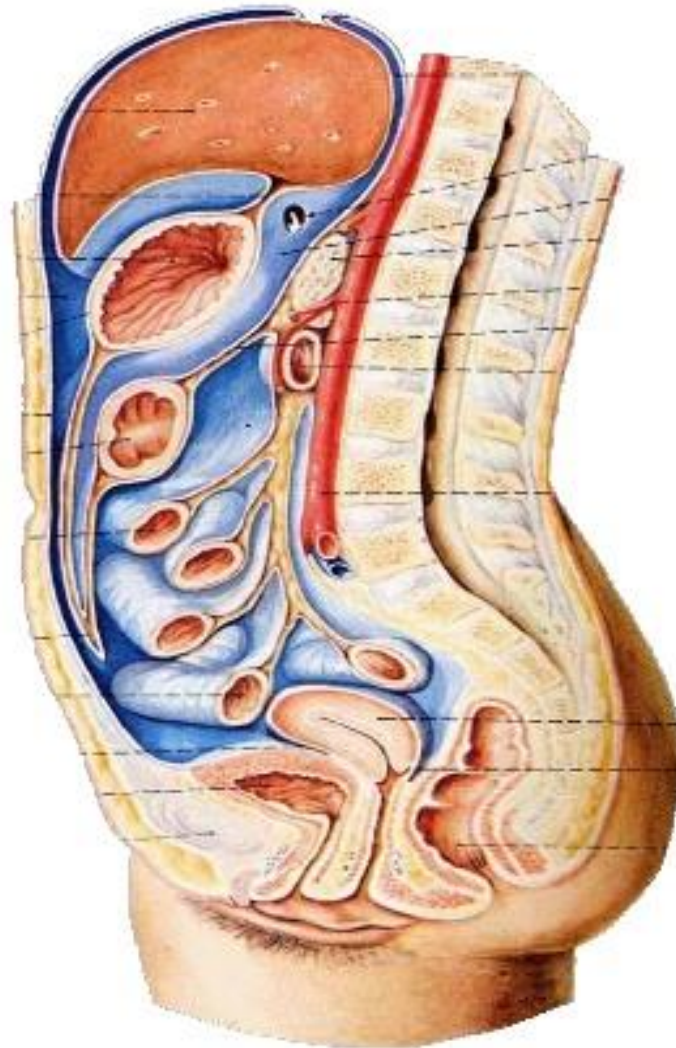


The Peritoneum

(lecture 3)

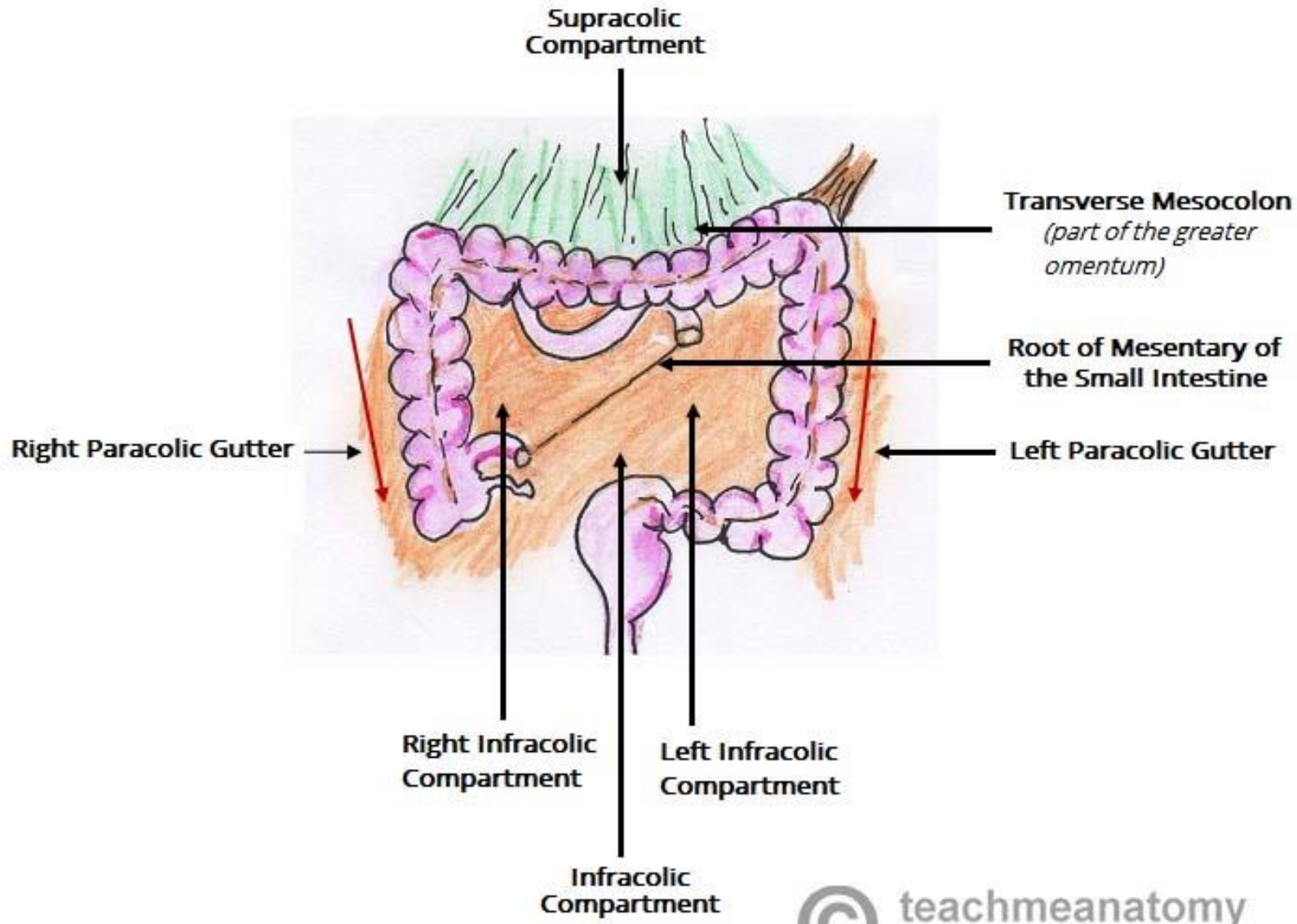


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<https://www.slideshare.net/MehulTandel/peritoneum-dr-mehul-tandel>

SPECIAL REGIONS OF THE PERITONEAL CAVITY

- **Parts of peritoneal cavity:** Abdomen proper and Pelvic cavity
- **Abdominal cavity is divided into:** Supracolic and Infracolic compartments
- **Subdivisions of supracolic compartment:** Number of subphrenic spaces
- **Subdivisions of infracolic compartment:** Right and left parts
- **Paracolic gutters:** Right and left



Supracolic Compartment/Subphrenic Spaces

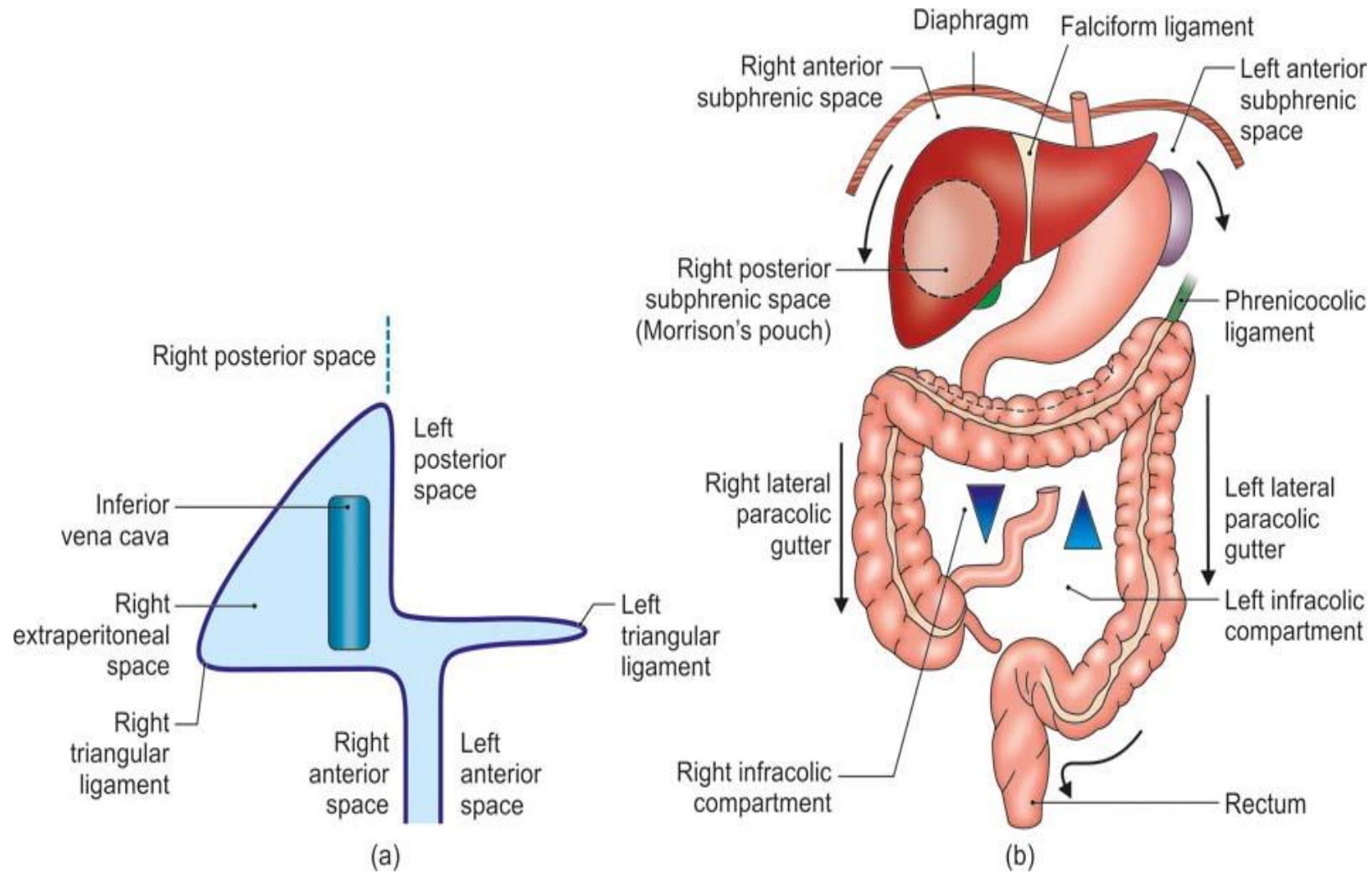
Classification

The **intraperitoneal spaces** are:

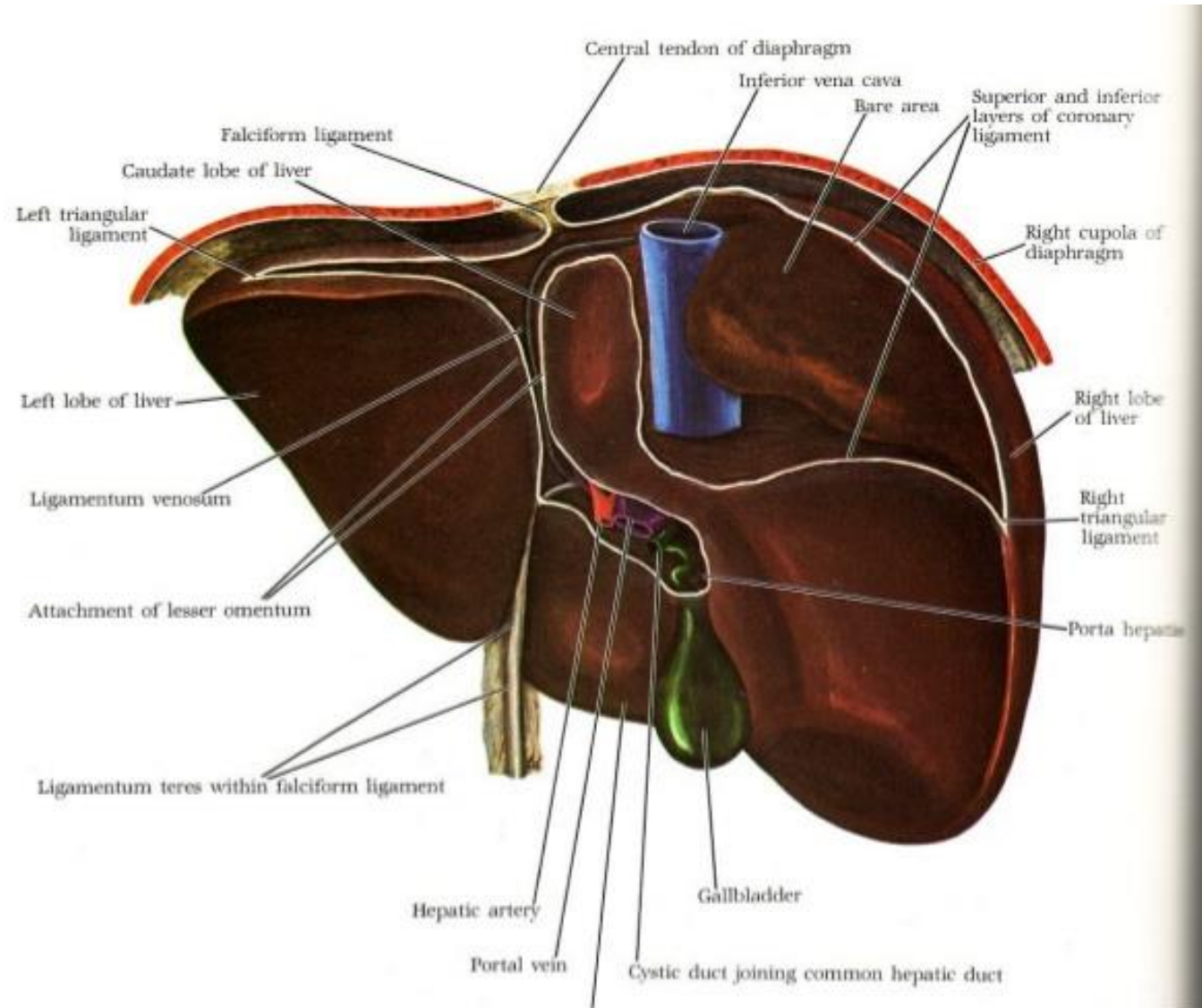
1. The left anterior space (left subphrenic space)
2. The left posterior space (left subhepatic or lesser sac)
3. The right anterior space (right subphrenic space)
4. The right posterior space (right subhepatic or Morrison's pouch)

The **extraperitoneal spaces** are:

1. The right extraperitoneal space
2. The left extraperitoneal space
3. Midline extraperitoneal space (bare area of liver)



(a) Subphrenic spaces and (b) subphrenic spaces shown in relation to the transverse colon



Hepatorenal Pouch (Morrison's Pouch)

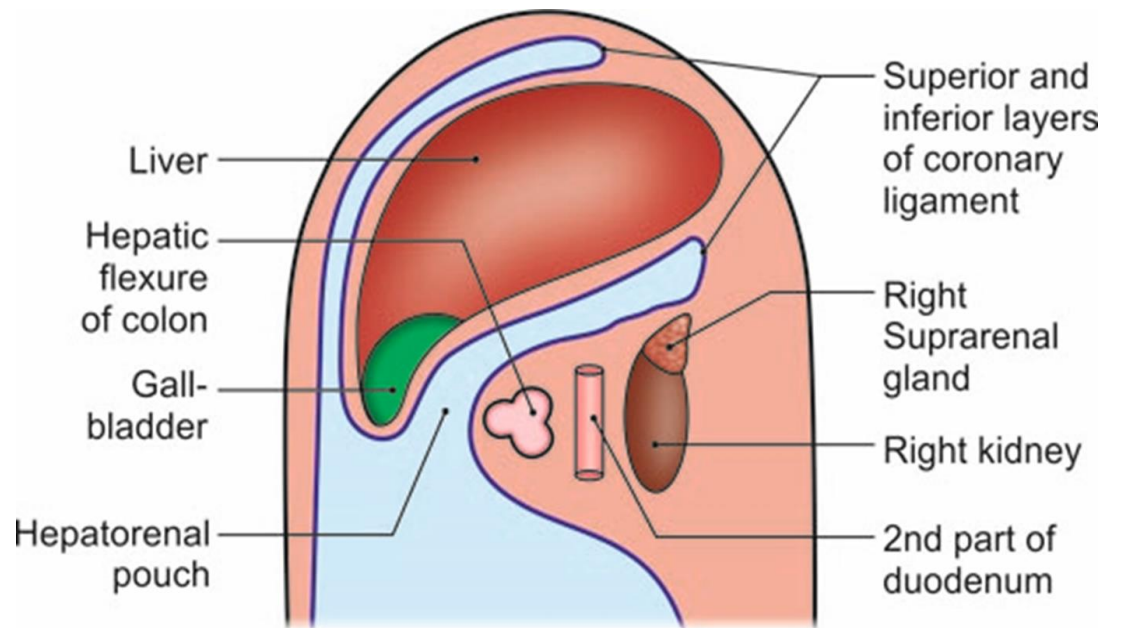
Boundaries:

Anteriorly

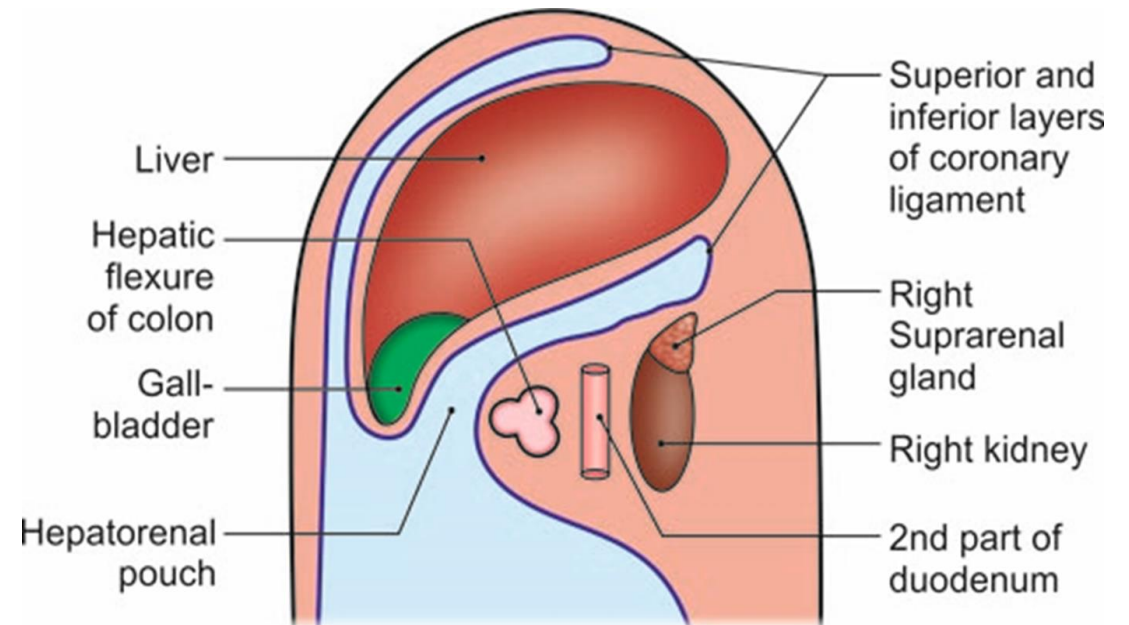
- The inferior surface of the right lobe of the liver.
- The gallbladder.

Posteriorly

- The right suprarenal gland
- The upper part of the right kidney
- The second part of the duodenum
- The hepatic flexure of the colon
- The transverse mesocolon
- A part of the head of the pancreas

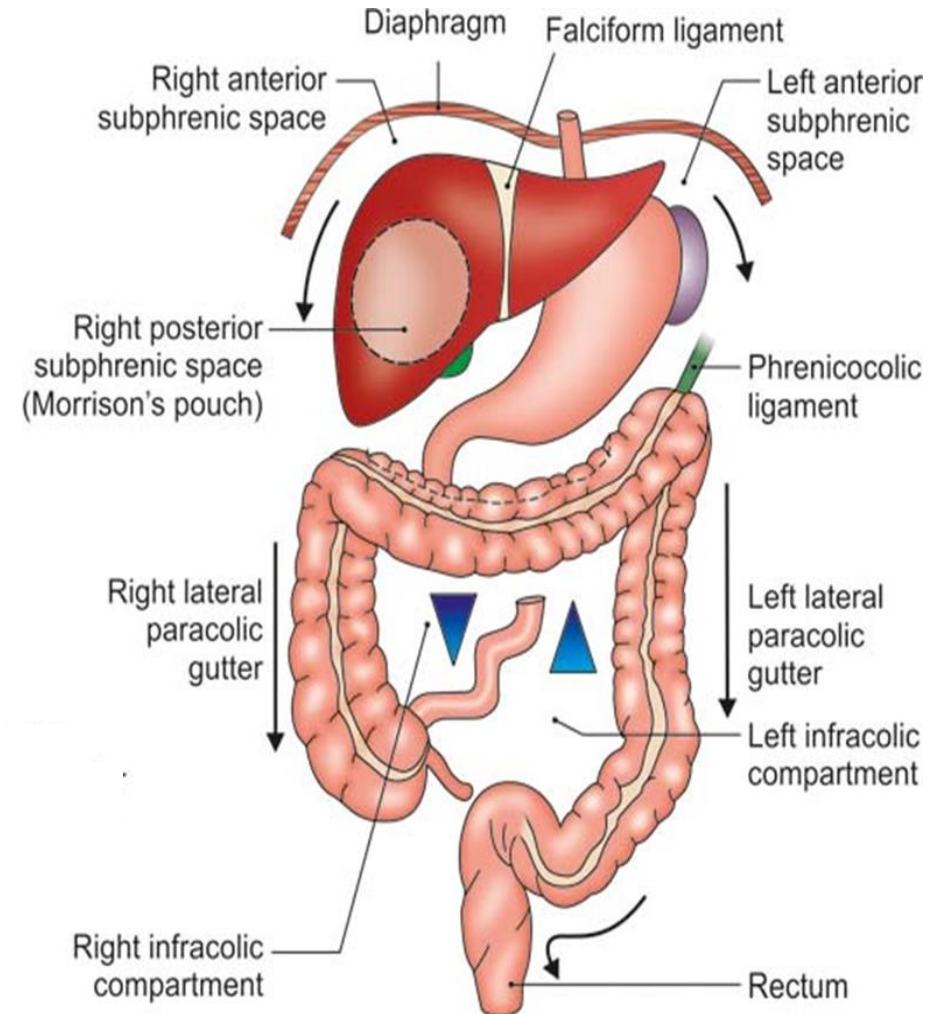


- **Superiorly:** The inferior layer of the coronary ligament
- **Inferiorly:** It opens into the general peritoneal cavity
- **Left:** Communicate with omental bursa
- **Right:** Limited by diaphragm

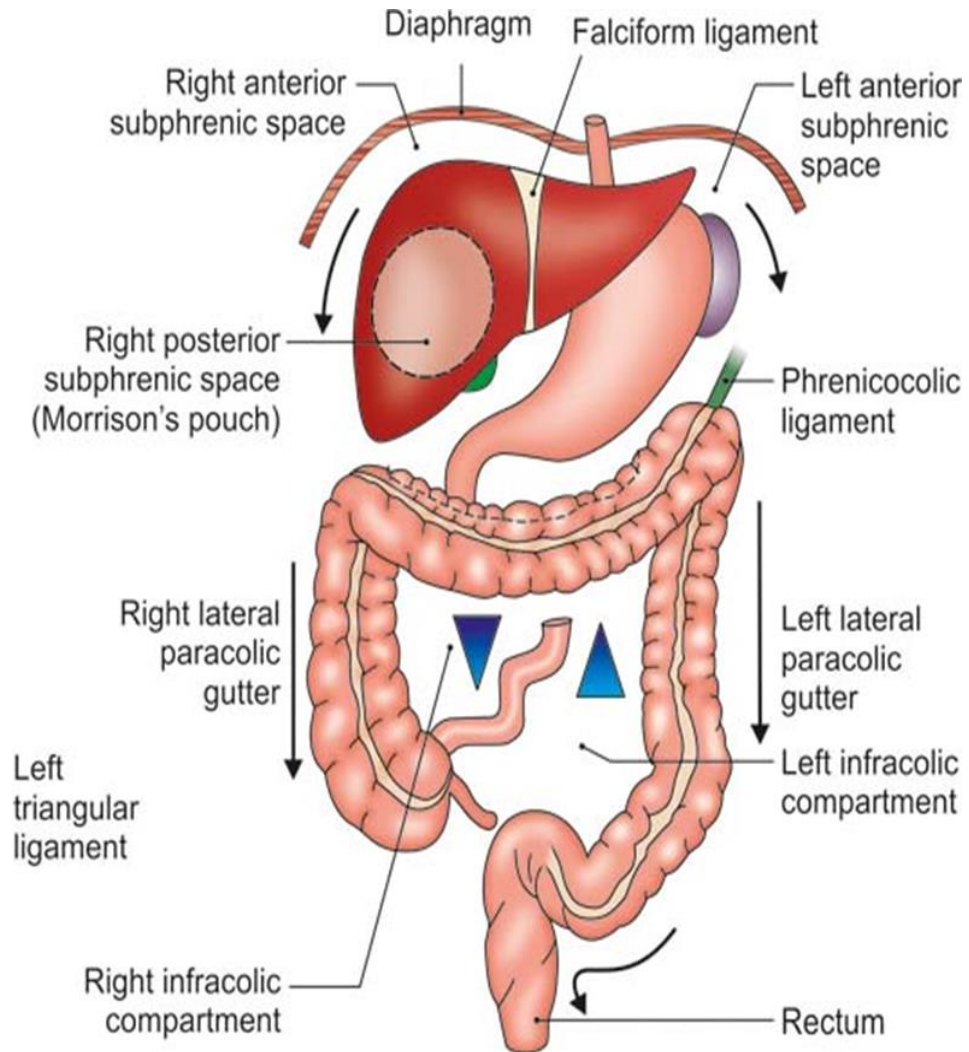


Infracolic Compartments

- Right Infracolic Compartment
- Left Infracolic Compartment



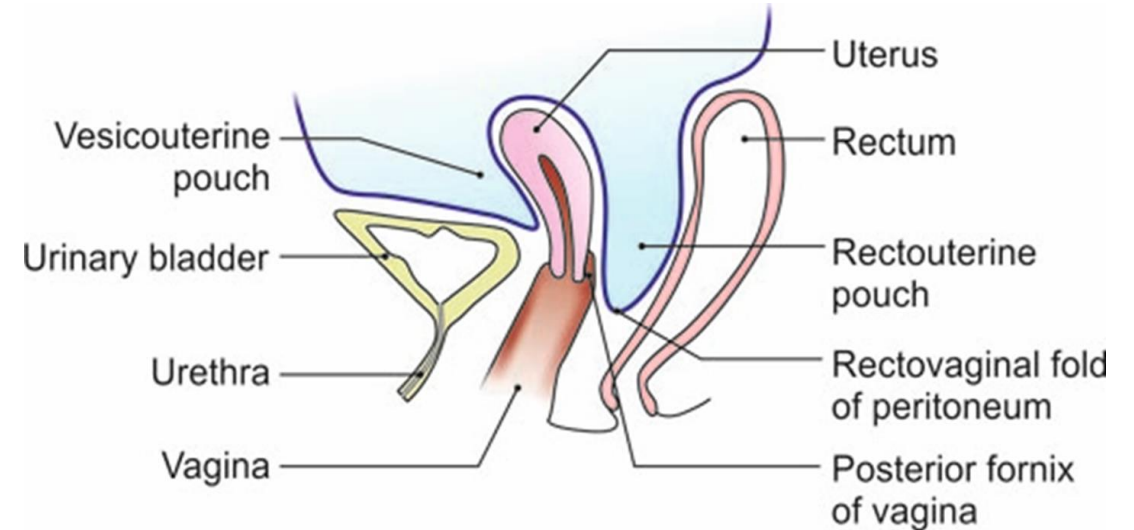
Paracolic gutters



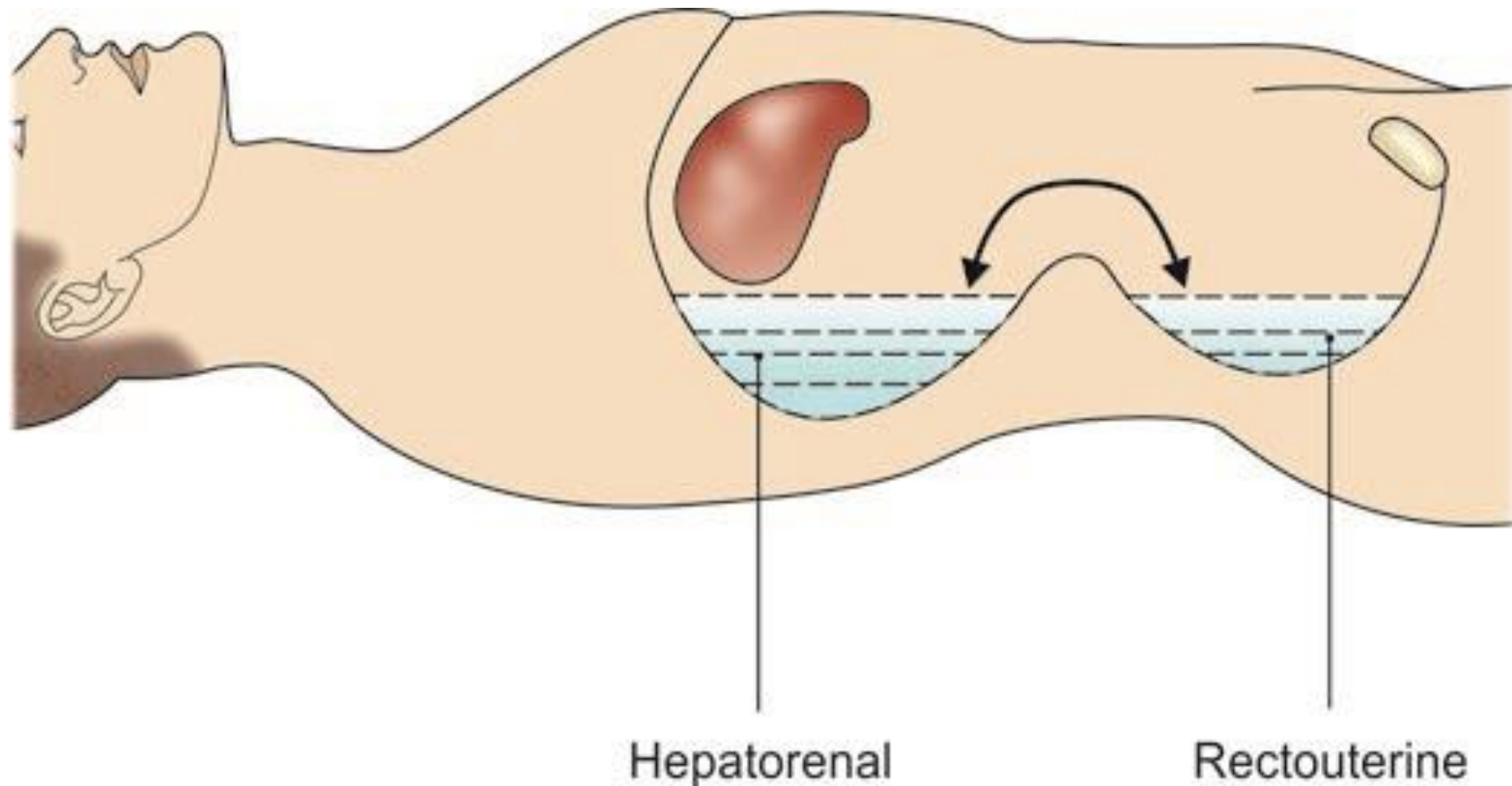
Rectouterine Pouch (Pouch of Douglas)

Boundaries:

- Anteriorly: uterus and posterior fornix of vagina
- Posteriorly: rectum
- Inferiorly (floor): rectovaginal fold of peritoneum

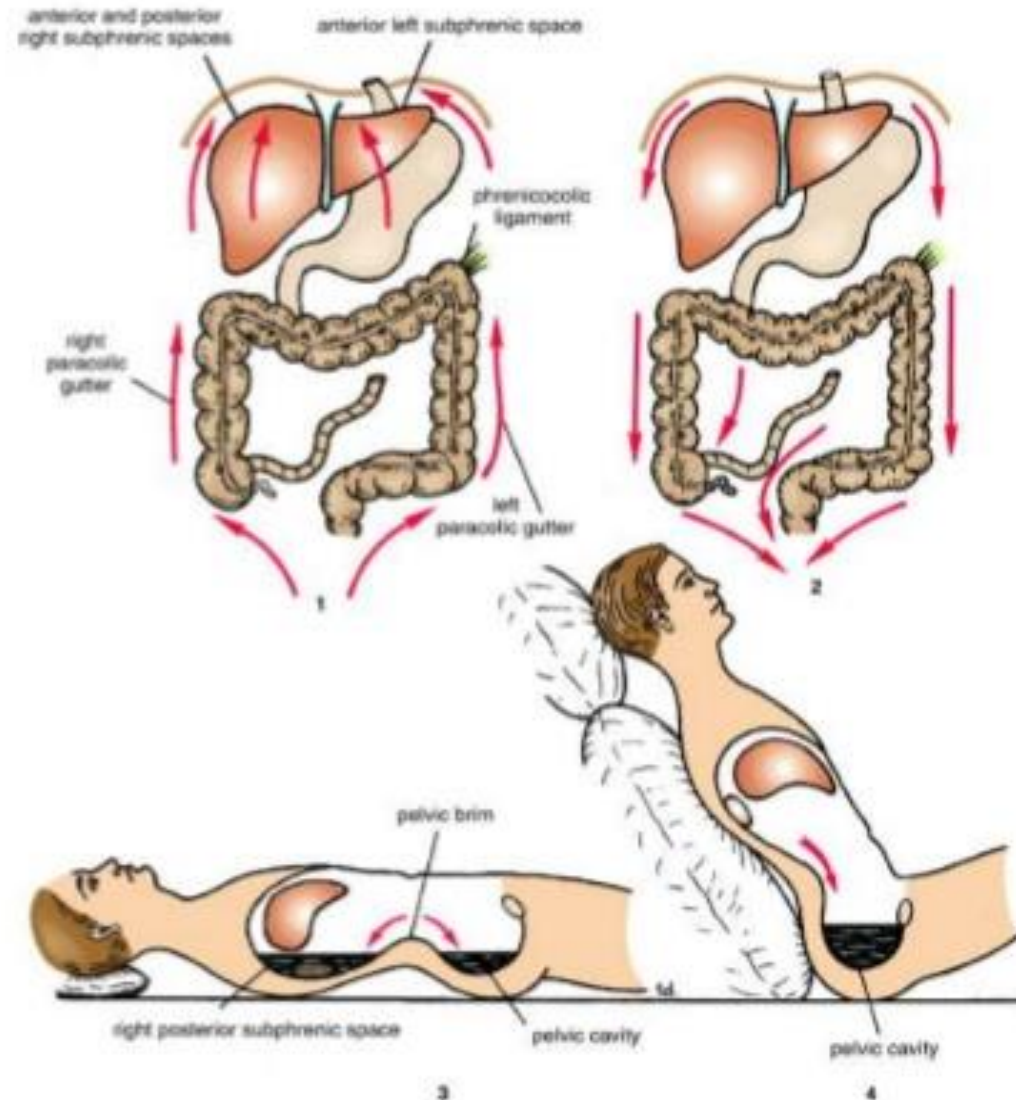


Morrison's or hepatorenal pouch with rectouterine or Douglas pouch

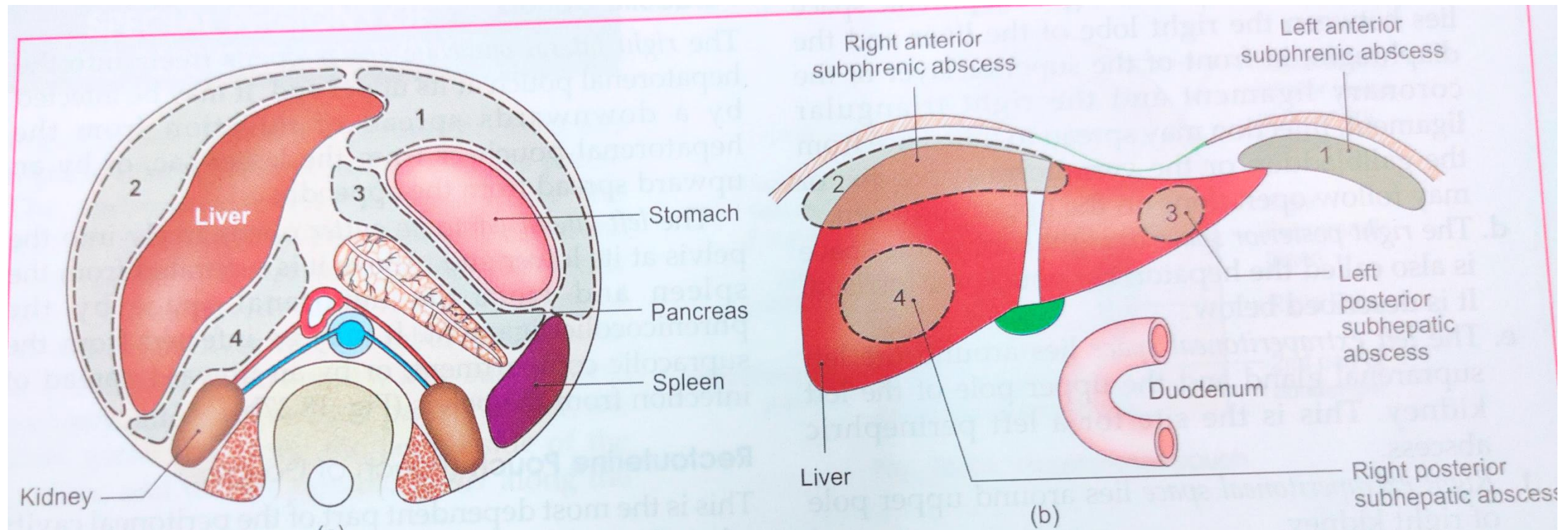


Peritoneal abscess

- Hepato-renal space – m.c. site for subphrenic abscess
 - In supine position
- Recto-uterine pouch or recto-vesical pouch
 - In Fowler's position (45° angle)



Sites of intraperitoneal subphrenic & subhepatic abscesses



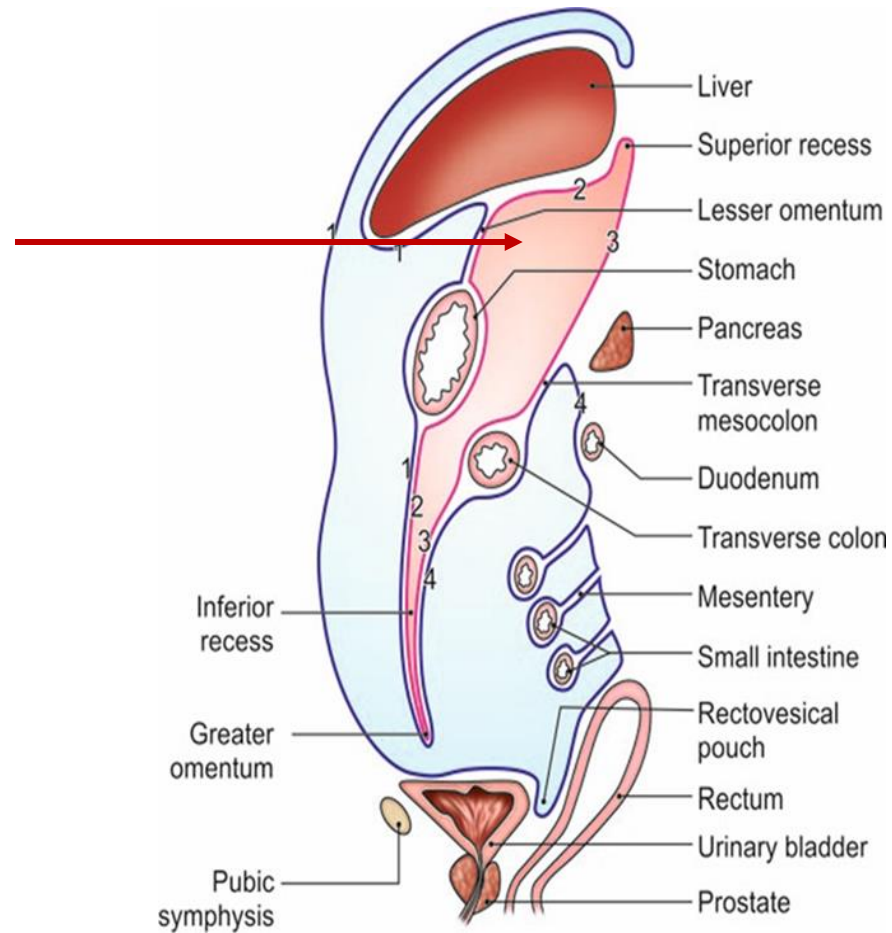
Peritoneal Fossae (Recesses)

- Small pockets of peritoneal cavity enclosed by small, inconstant folds of peritoneum.
- Commonly occur at transitional zones between the absorbed and unabsorbed parts of mesentery.
- Best observed in fetuses, mostly obliterated in adults.
- Sometimes they persist to form potential sites for internal hernia and strangulation.

Classification

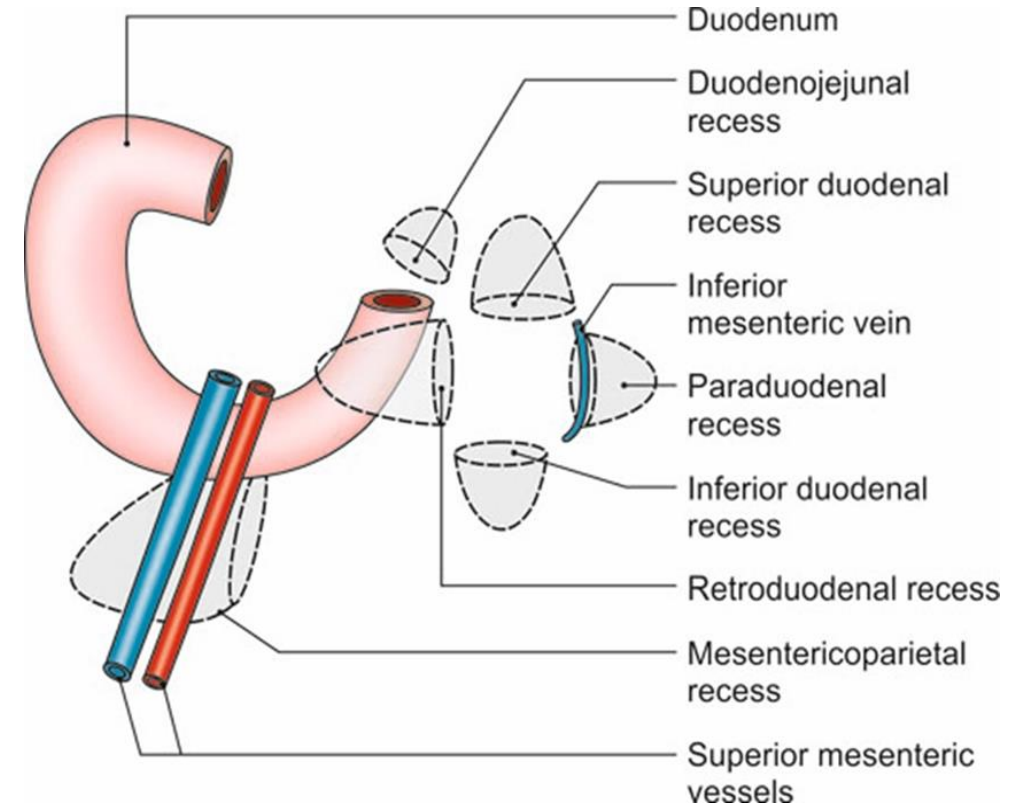
- Lesser Sac
- Duodenal Fossae or Recesses
- Caecal Fossae
- Intersigmoid Recess

LESSER SAC OR OMENTAL BURSA



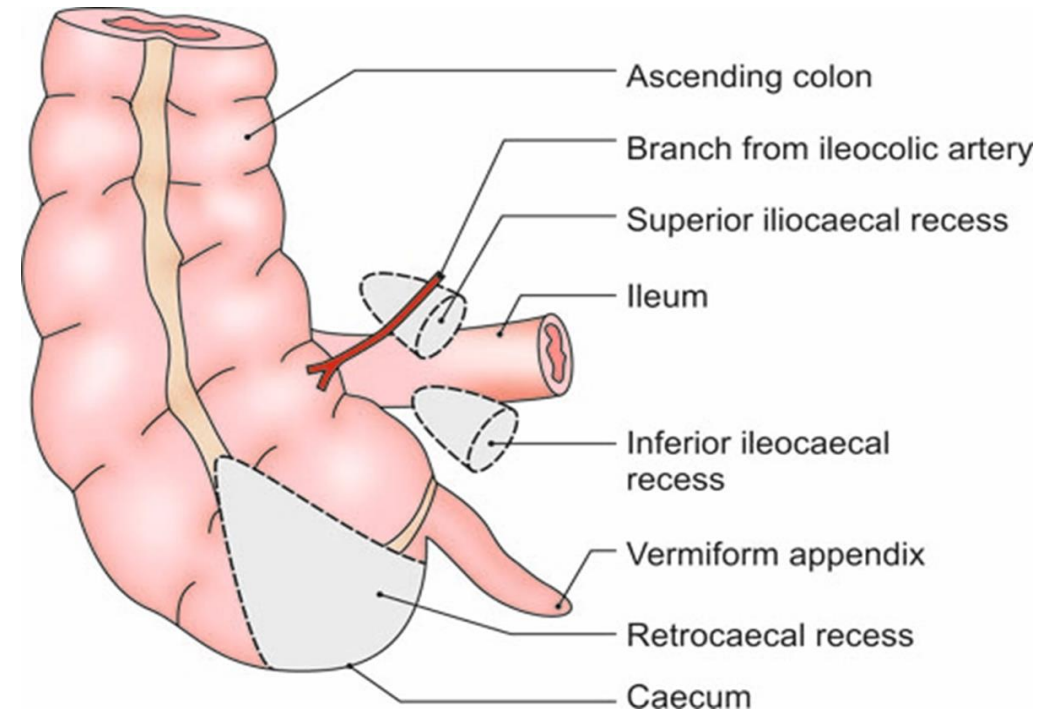
Duodenal Fossae or Recesses

- The superior duodenal recess
- The inferior duodenal recess
- The paraduodenal recess
- The retroduodenal recess
- The duodenojejunal or mesocolic recess
- The mesentericoparietal fossa of Waldeyer

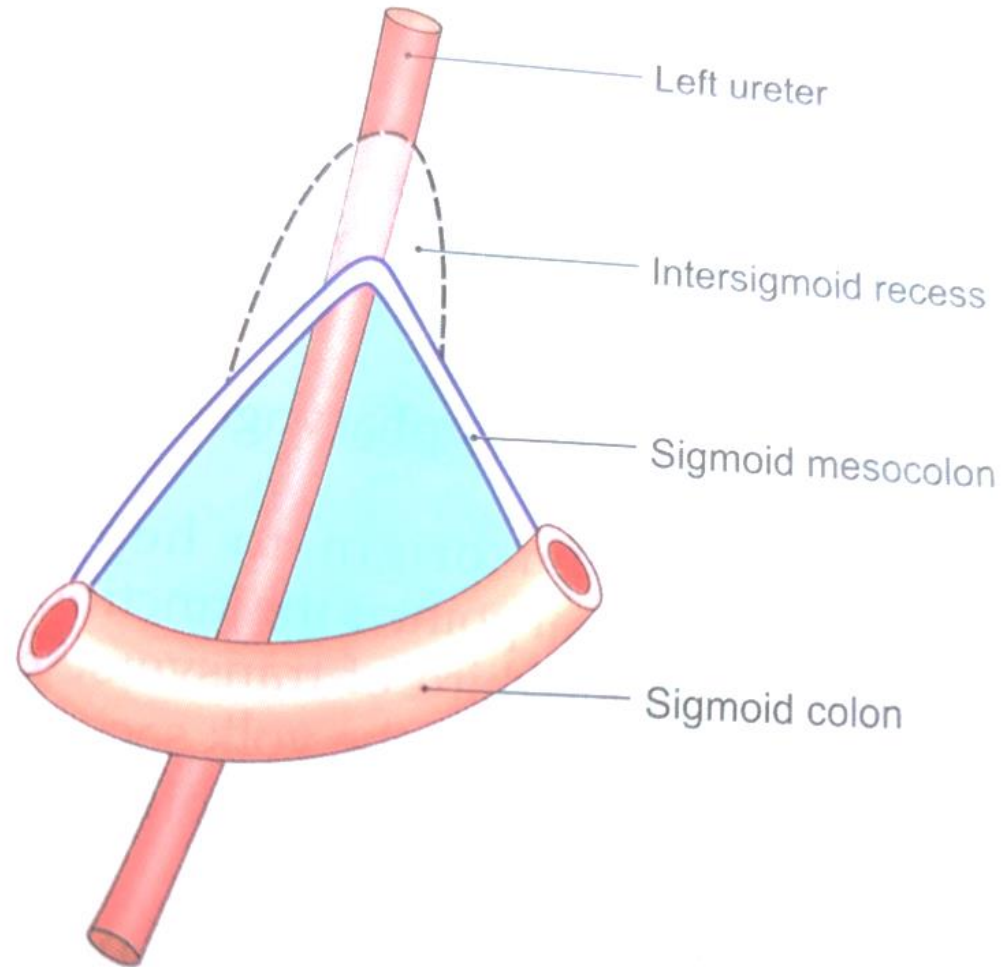


Caecal Fossae

- The superior ileocaecal recess
- The inferior ileocaecal recess
- The retrocaecal recess



The Intersigmoid Recess



CLINICAL ANATOMY

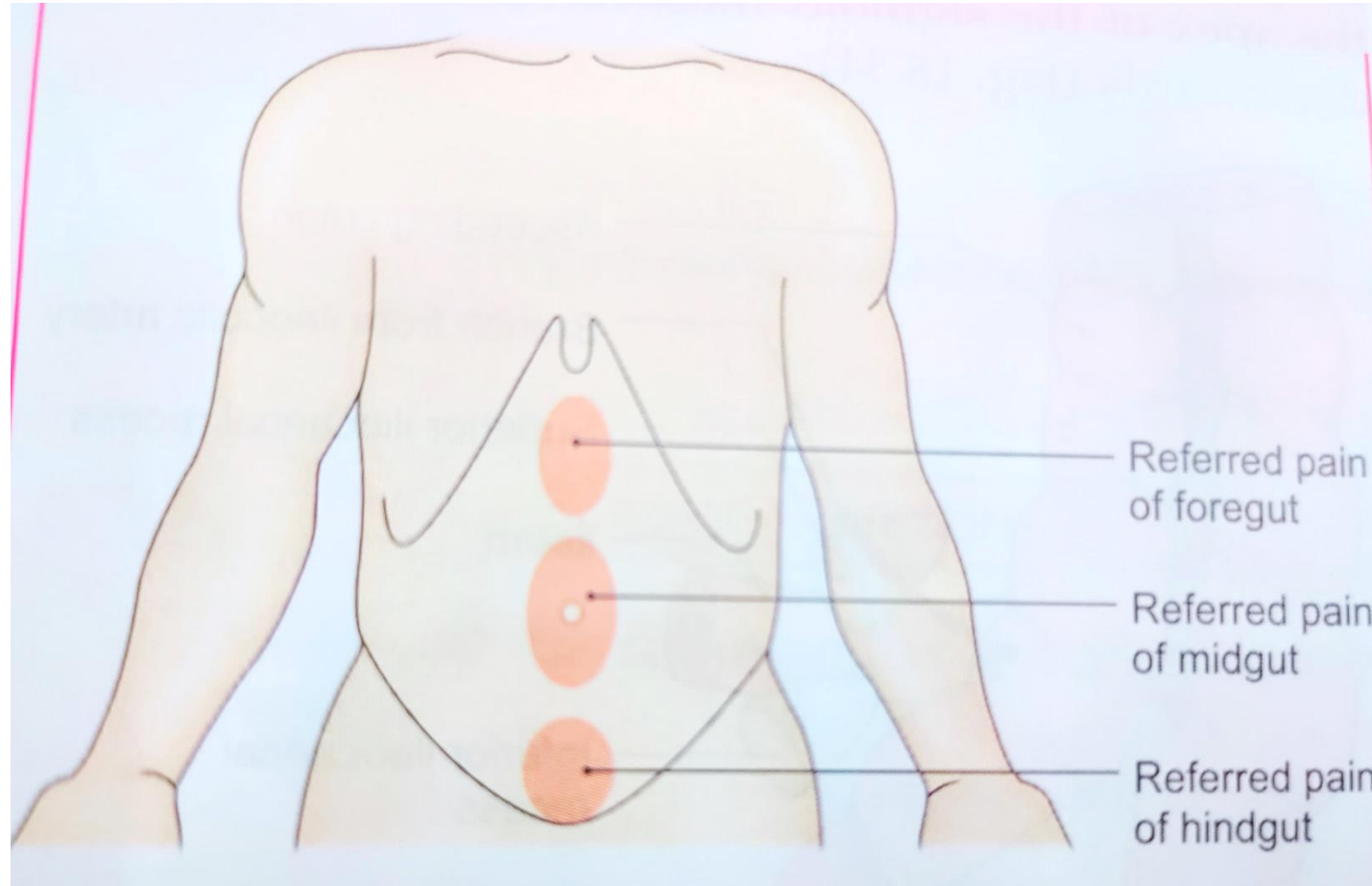
- **Internal hernia:** May occur in the opening of lesser sac. It may also occur in between paraduodenal recesses. One has to remember the inferior mesenteric vein in the paraduodenal fold during reduction of the hernia.
- Pain of foregut derived structures is felt in the epigastric area.
- Pain of midgut derived structures is felt in the periumbilical area.
- Pain of hindgut derived structures is felt in the suprapubic area.

Internal abdominal hernia

Occasionally a **loop of intestine** may enter into the peritoneal pouch or recesses and gets **strangulated**



Referred pain from the gut-derived structures



THANKYOU