

Abdominal Cavity

Chapter 7

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Peritoneum

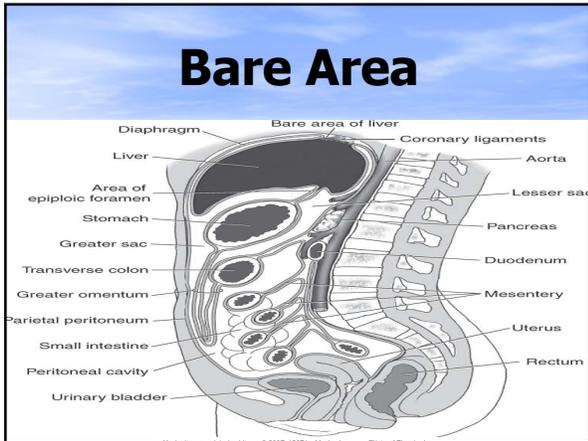
- **Thin serous membrane that lines the walls of the abdominal cavity**
- **2 layers:**
 - Parietal – lines abdominal wall
 - Visceral – covers the organs
- **Layers are separated by a film of serous fluid for lubrication**

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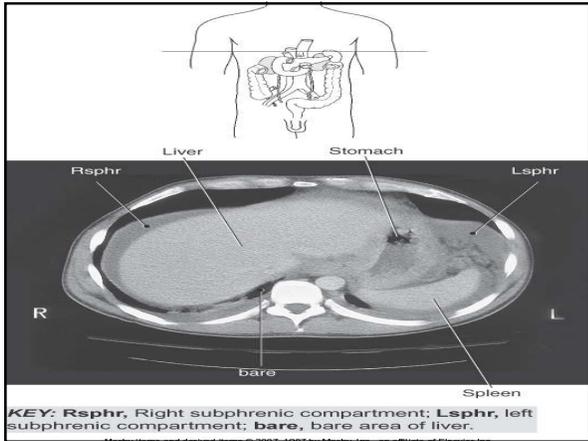
Peritoneum

- **Forms a cavity that encloses:**
 - Liver (except for the bare area)
 - Gallbladder
 - Spleen
 - Stomach
 - Ovaries
 - Majority of intestines

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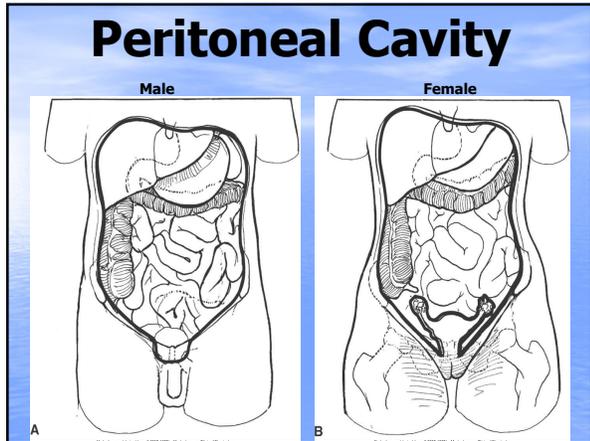


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Peritoneal Cavity

- **Males**
 - Closed cavity
- **Females**
 - Communicates with the exterior through the:
 - Vagina
 - Cervix
 - Uterus
 - Ovaries
 - Fallopian Tubes

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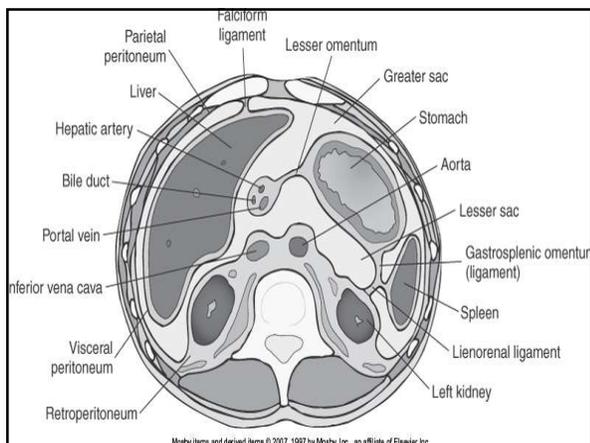


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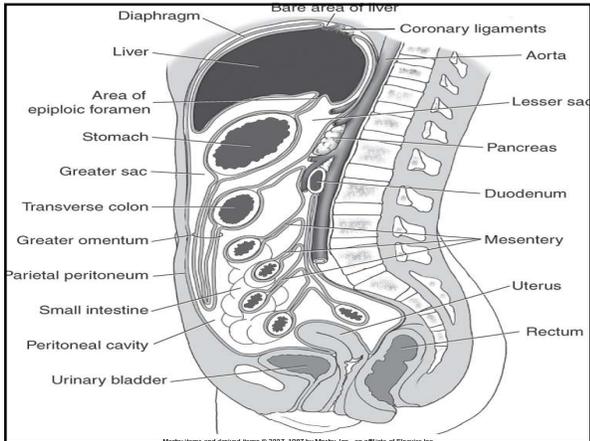
Peritoneal Cavity

- **Greater Sac**
 - Located between:
 - Inner surface of the anterior wall
 - Outer surface of the abdominal viscera
- **Lesser Sac (omental bursa)**
 - Located between:
 - Posterior surface of the stomach
 - Posterior abdominal wall

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Epiploic Foramen

- **Epiploic foramen of Winslow**
 - Area where the following communicates
 - Greater Sac
 - Lesser Sac
 - Located:
 - Superiorly & posteriorly
 - Inferior to liver

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Mesentery

- **Double layer of peritoneum**
- **Encloses the intestine & attaches it to the abdominal wall**

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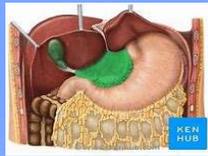
Omentum

- A mesentery (double layer of peritoneum)
- Attached to the stomach
- Visible only when fluid is present

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Greater Omentum

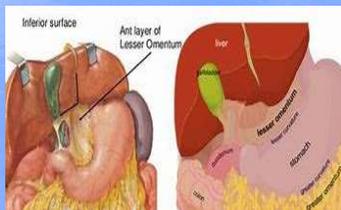
- Fatty fold of peritoneum
- Drapes down from the greater curvature of the stomach
- Connects the stomach with
 - Spleen
 - Transverse colon



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Lesser Omentum

- Attaches the duodenum and lesser curve of the stomach to
 - Liver



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Falciform Ligament

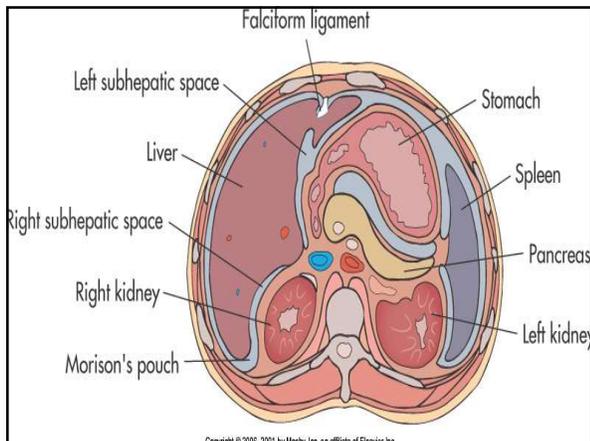
- Extends from umbilicus to the diaphragm in a parasagittal plane
- Contains the ligamentum teres
- Divides the liver into
 - Left lobe
 - Right lobe

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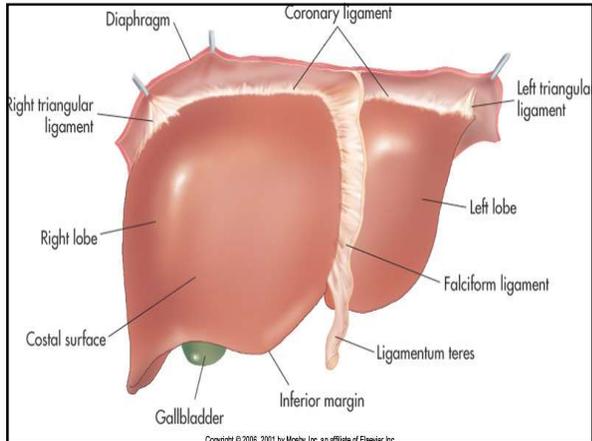
Ligamentum Teres

- Also known as the Round ligament
 - Within the Falciform ligament
- The obliterated umbilical vein
- Attaches the internal surface of the umbilicus
- Lying within the falciform ligament

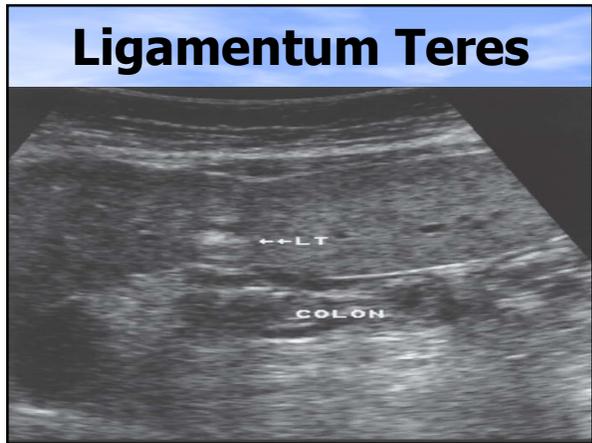
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Ligamentum Venosum

- Separates the left lobe of liver from the caudate lobe
- Seen:
 - Anterior to caudate lobe

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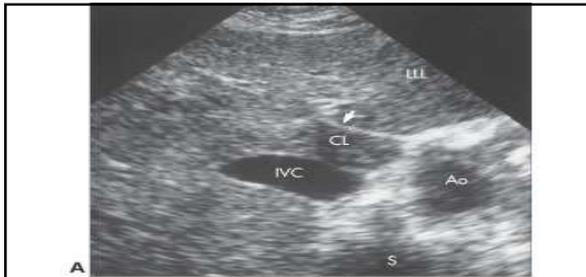
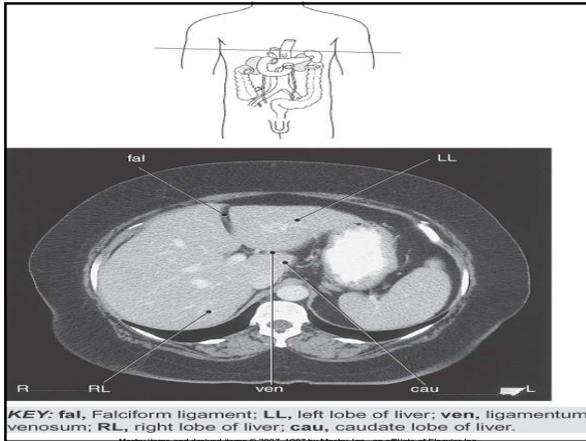


Figure 6-8A Ligamentum venosum. **A**, Transverse image high in the liver shows the spine (S), aorta (AO), and inferior vena cava (IVC). The caudate lobe (CL) is anterior to the inferior vena cava (IVC) and is separated from the left lobe of the liver (LLL) by the ligamentum venosum (arrow). **B**, Longitudinal image through the right lobe of the liver (RL) shows the ligamentum venosum (arrow) and caudate lobe (CL).

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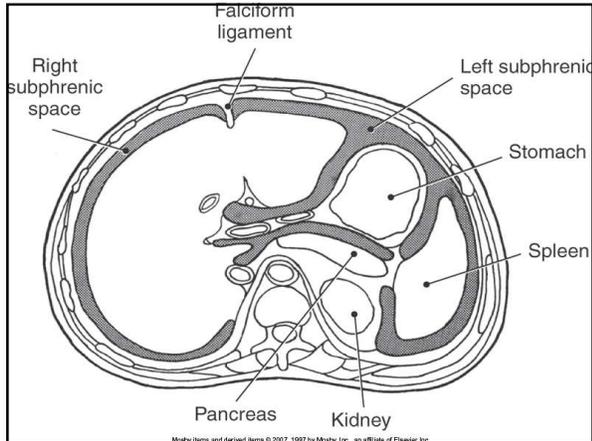
KEY: fal, Falciform ligament; LL, left lobe of liver; ven, ligamentum venosum; RL, right lobe of liver; cau, caudate lobe of liver.

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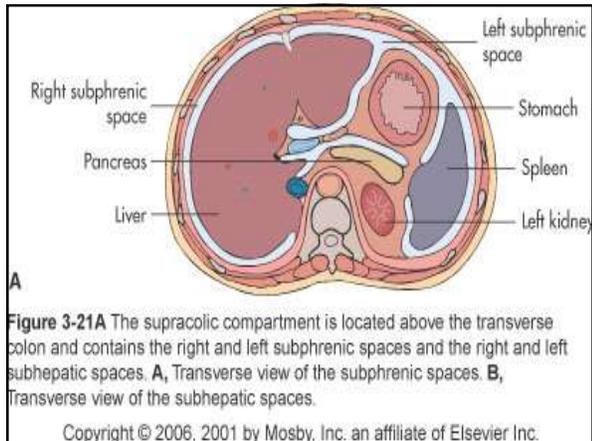
Subphrenic Spaces

- **Located between**
 - Diaphragm
 - Anterior portion of liver
- **Divided by the falciform ligament into:**
 - Right compartment
 - Left compartment

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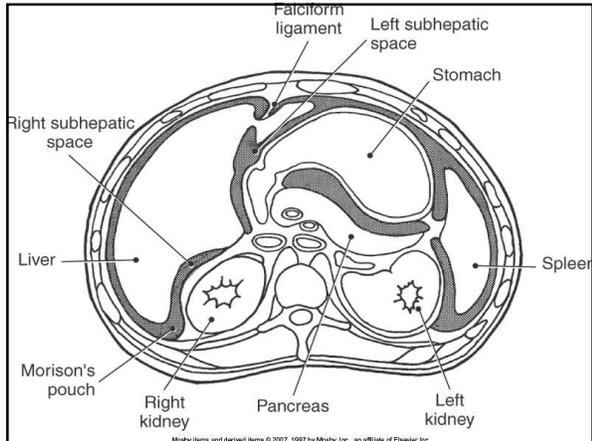


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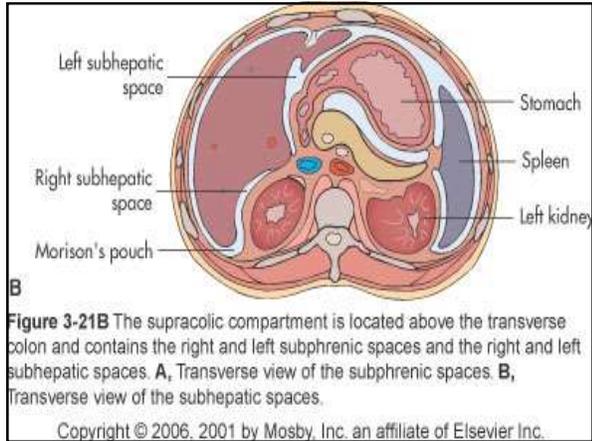
Subhepatic Spaces

- **Located posterior and inferior between the liver and abdominal viscera**
- **Right Subhepatic Space**
 - **Located between liver and kidney**
 - **Contains Morison's Pouch**
 - **Deepest part of abdominal cavity**
 - **Common site for fluid collection**

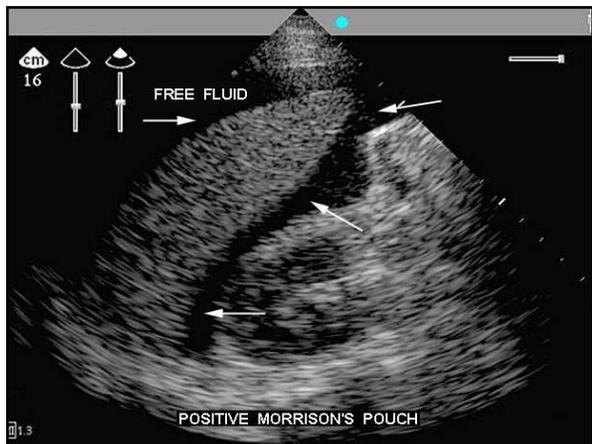
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Paracolic Gutters

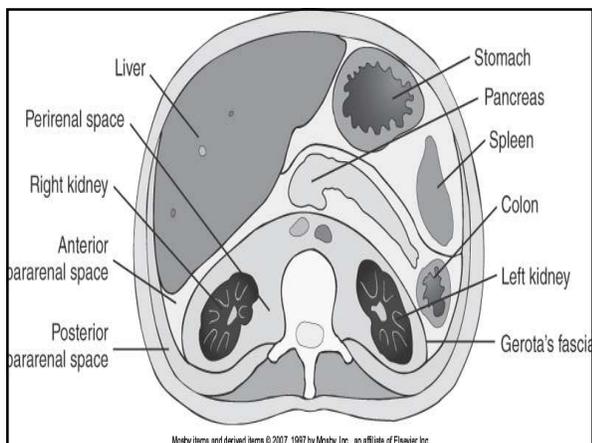
- **Trough-like spaces located lateral to the:**
 - **Ascending colon - Right**
 - **Descending colon - Left**
- **Right paracolic gutter**
 - **Deeper of the two**
 - **Common site for fluid collections**

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Retroperitoneum

- **Posterior to the peritoneum**
- **Structures**
 - **Kidneys**
 - **Ureters**
 - **Adrenal glands**
 - **Pancreas**
 - **Aorta**
 - **Ascending and Descending colon**
- **IVC**
- **Bladder**
- **Uterus**
- **Prostate**
- **Duodenum**

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Anterior Pararenal Space

- **Located between**
 - Anterior surface of renal fascia (Gerota's)
 - Posterior area of peritoneum
- **Structures**
 - Pancreas
 - Duodenum
 - Ascending and Descending colon

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Posterior Pararenal Space

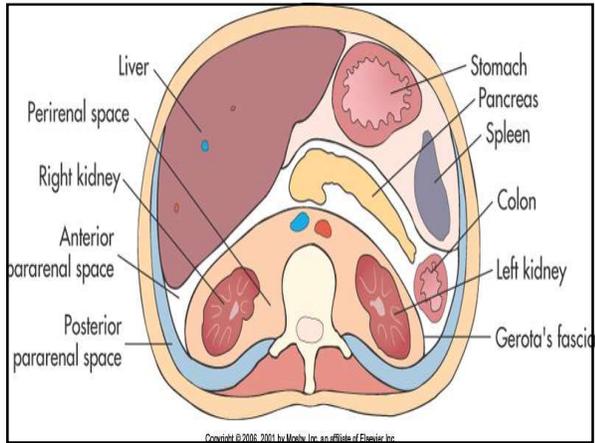
- **Located between**
 - Posterior renal fascia
 - Muscles of the posterior abdominal wall
- **Structures**
 - Fat
 - Vessels

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Perirenal Spaces

- **Located**
 - Directly around kidneys
- **Enclosed by renal fascia**
- **Structures**
 - kidneys
 - Adrenal gland
 - Lymph nodes
 - Blood vessels
 - Perirenal fat

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