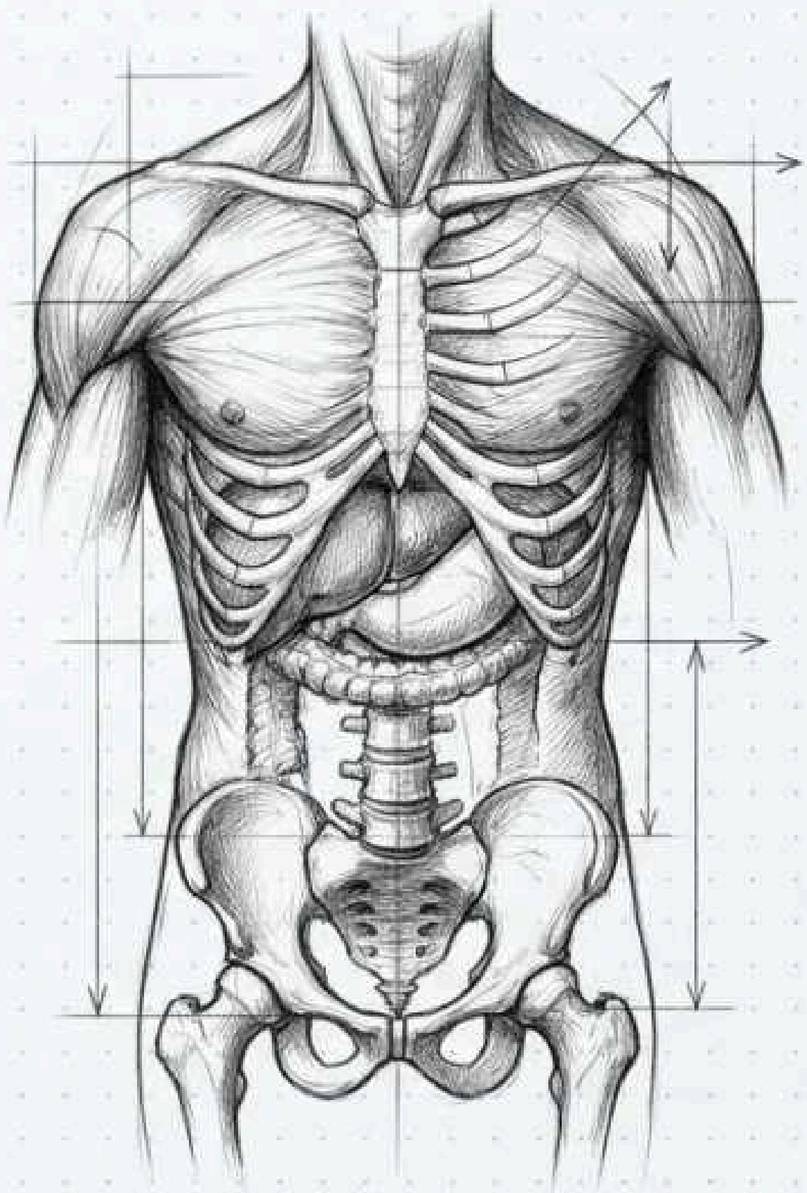
The Abdomen and Pelvis

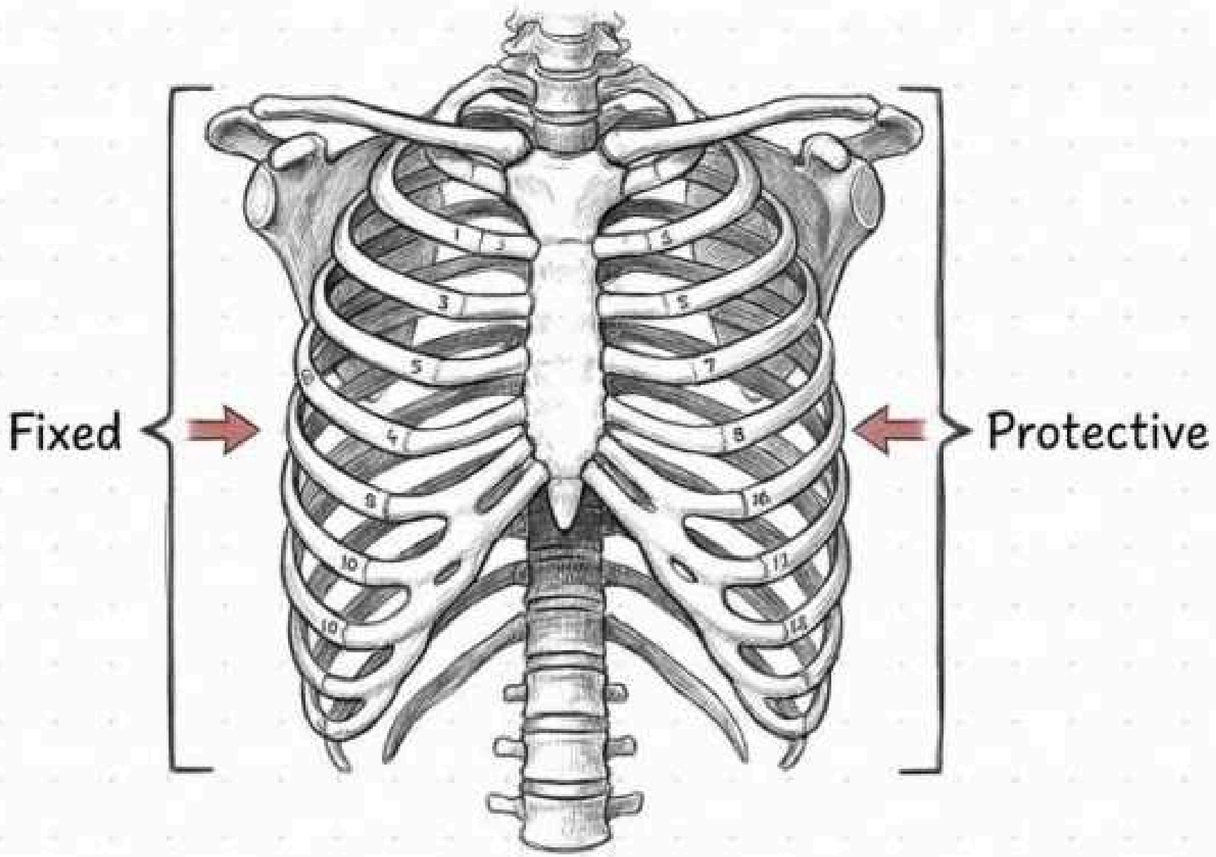
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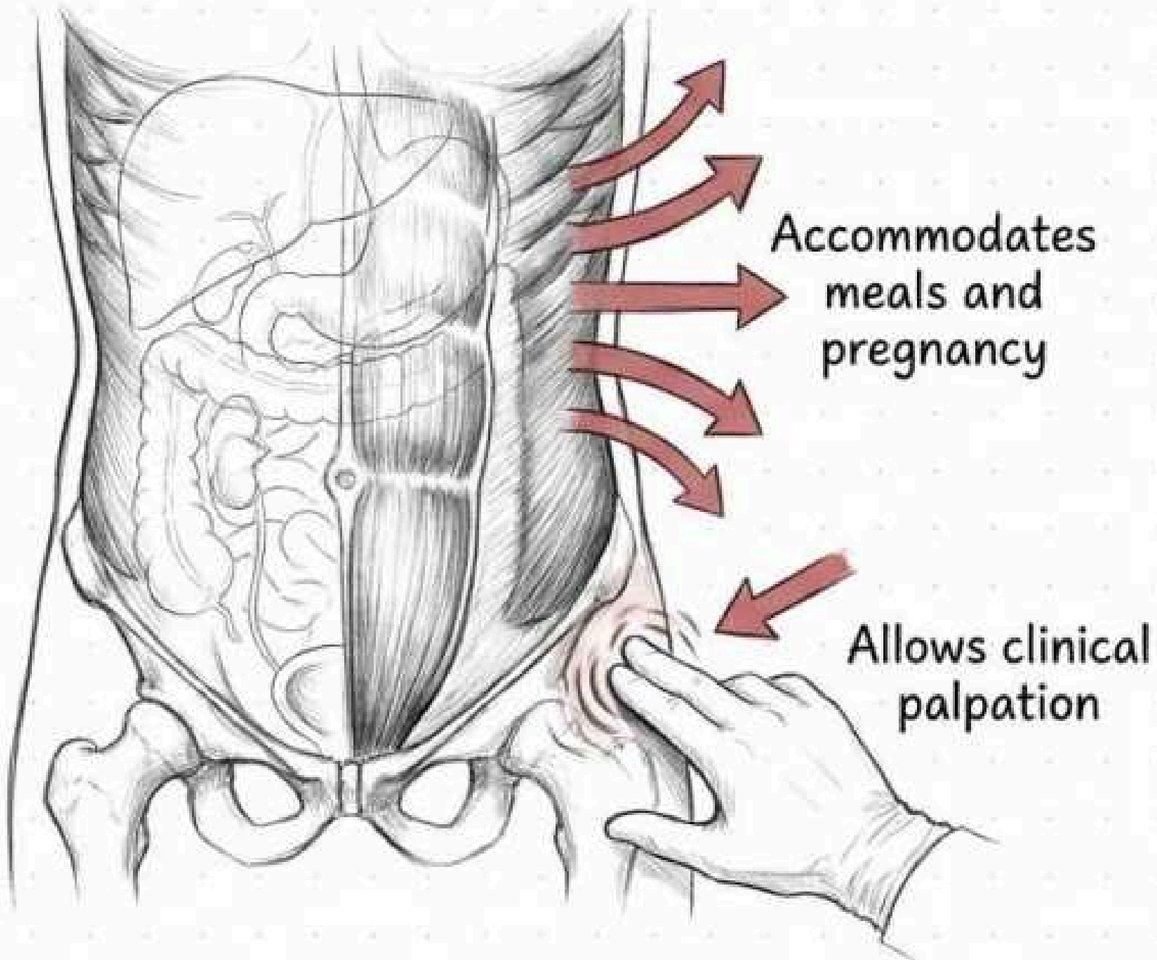
garyanderson@mail.grokbot.com | X: @garyanderson

The Abdomen Operates as a Dynamic, Muscular Container

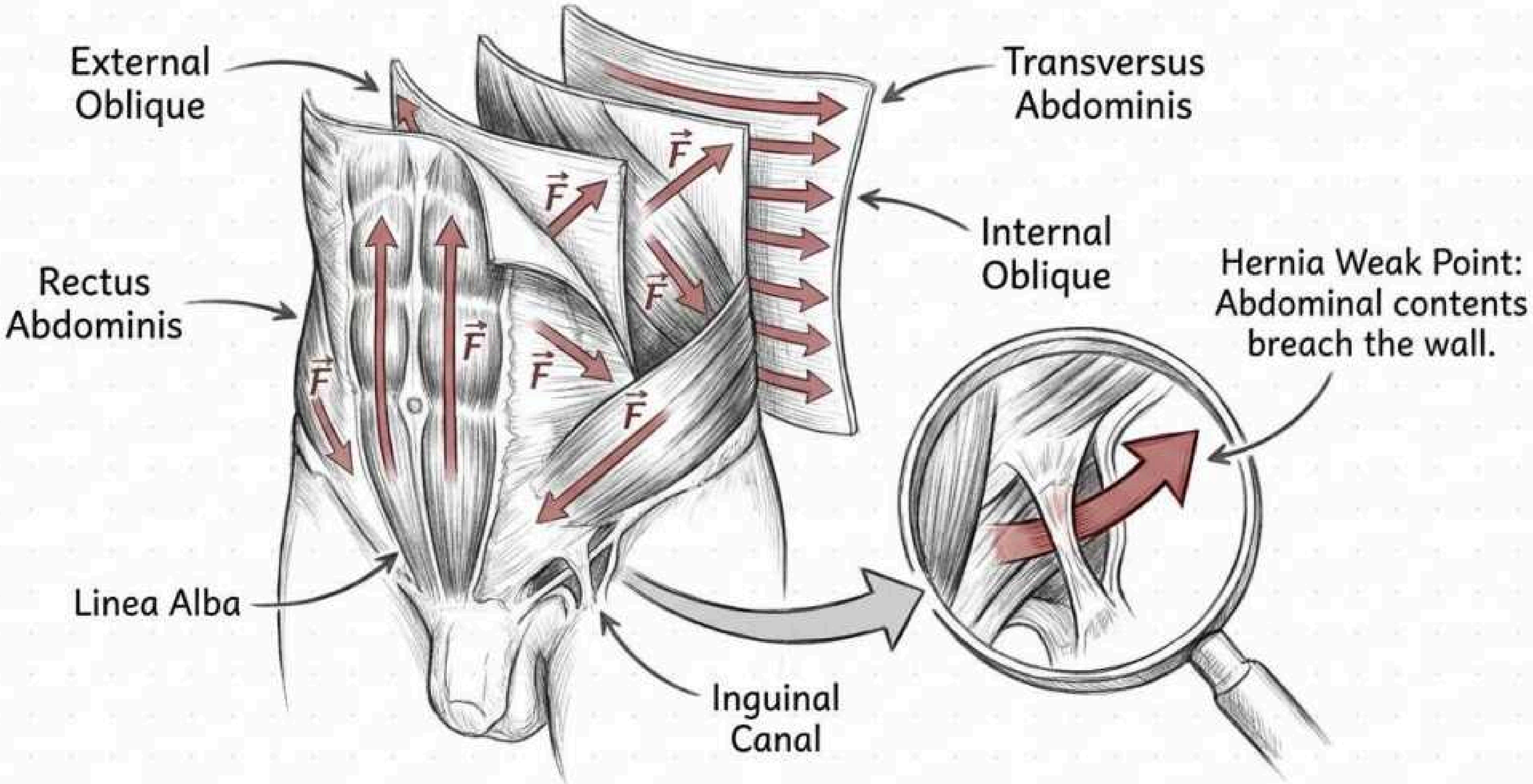
Thorax: A Rigid Cage



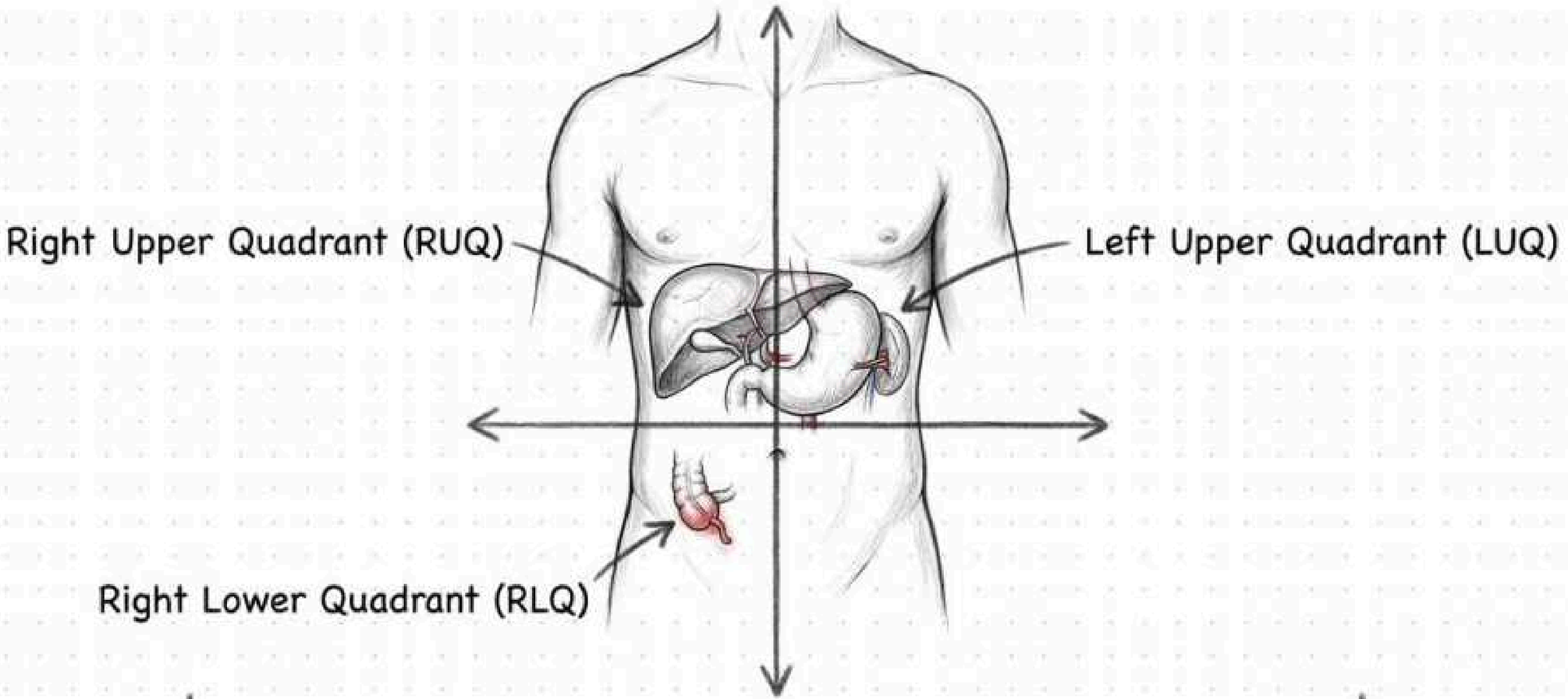
Abdomen & Pelvis: A Muscular Container



Cross-Hatched Muscle Fibers Generate Tensile Strength

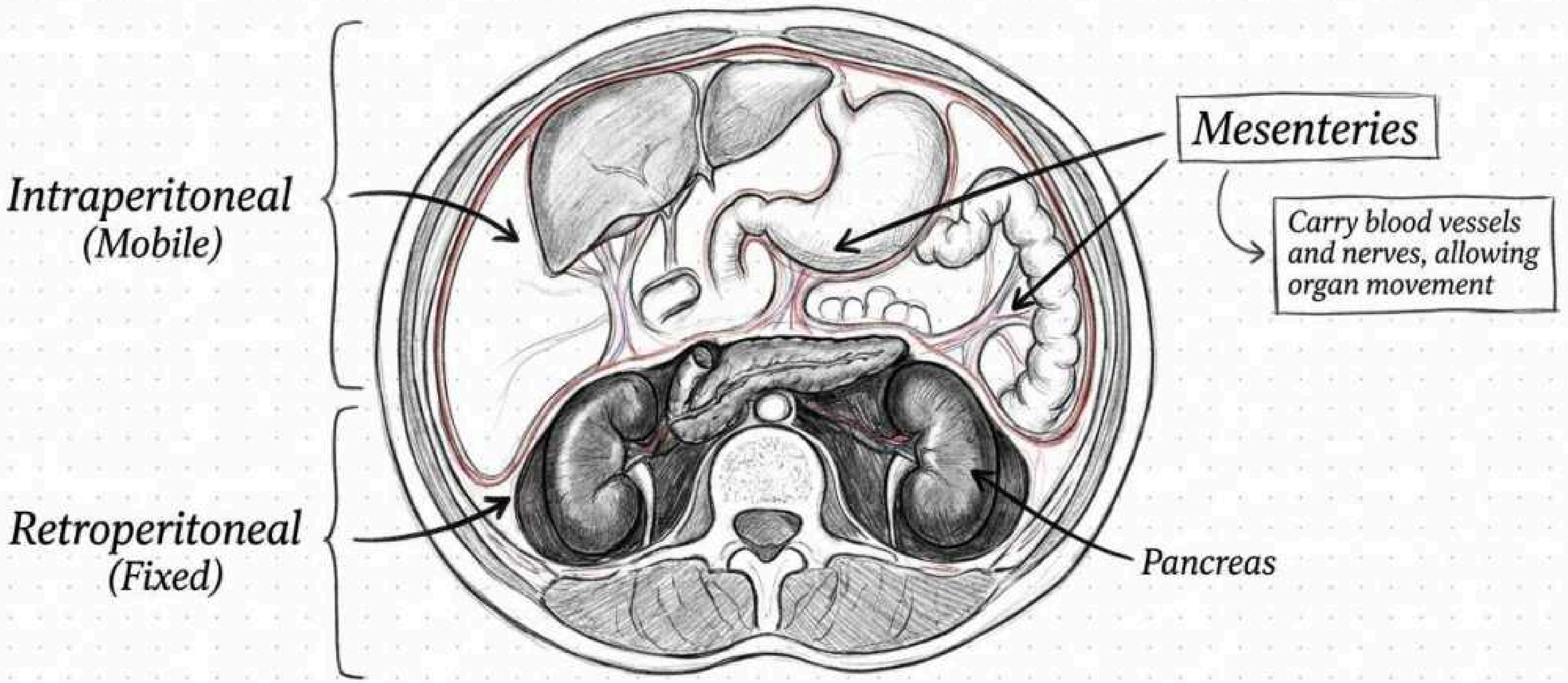


A 2x2 Coordinate Map Directs Clinical Reasoning



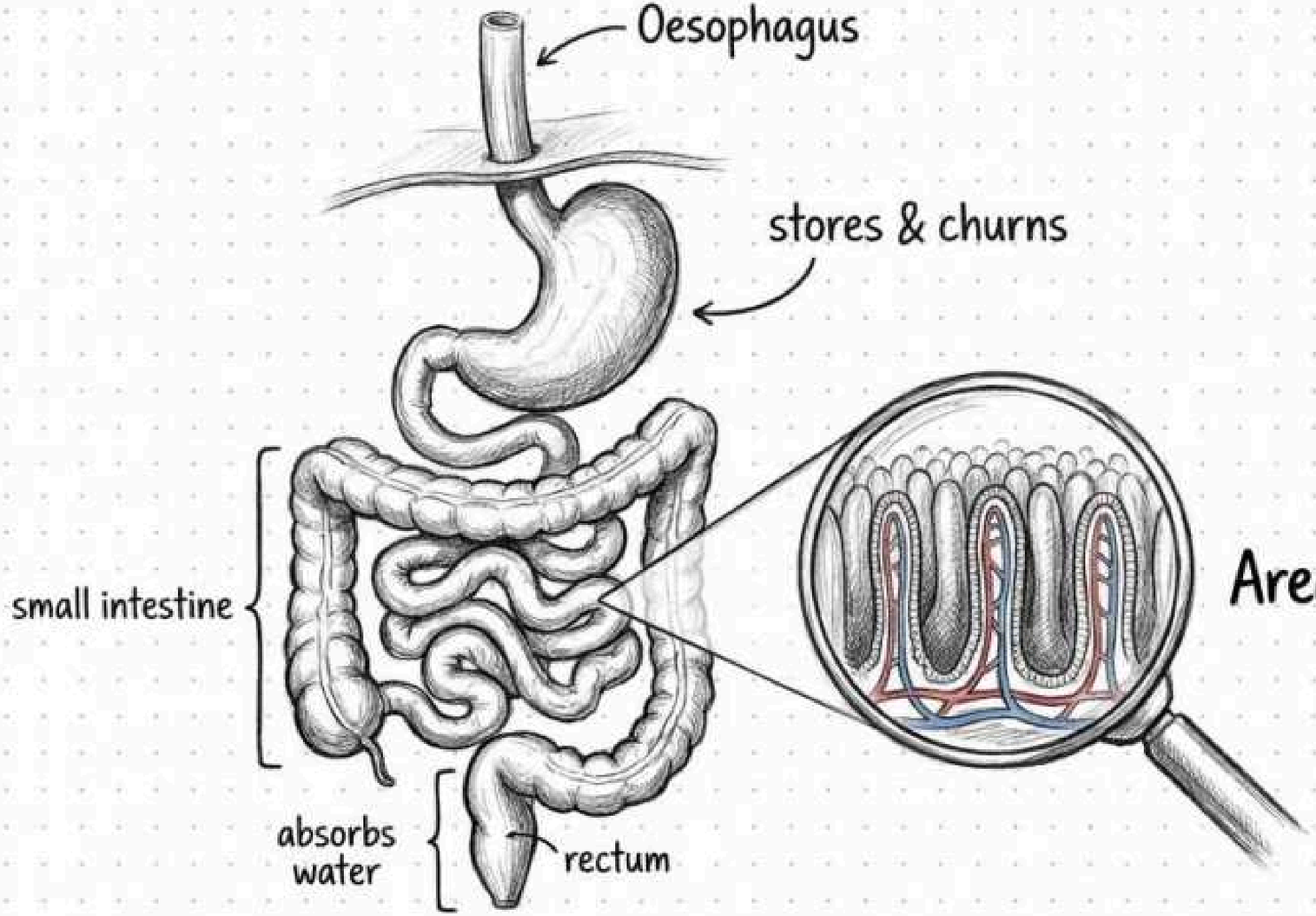
Mapping these quadrants is step one in diagnosing abdominal pain.

Organ Placement is Governed by the Peritoneum



The Gastrointestinal Tract Maximizes Surface Area for Absorption

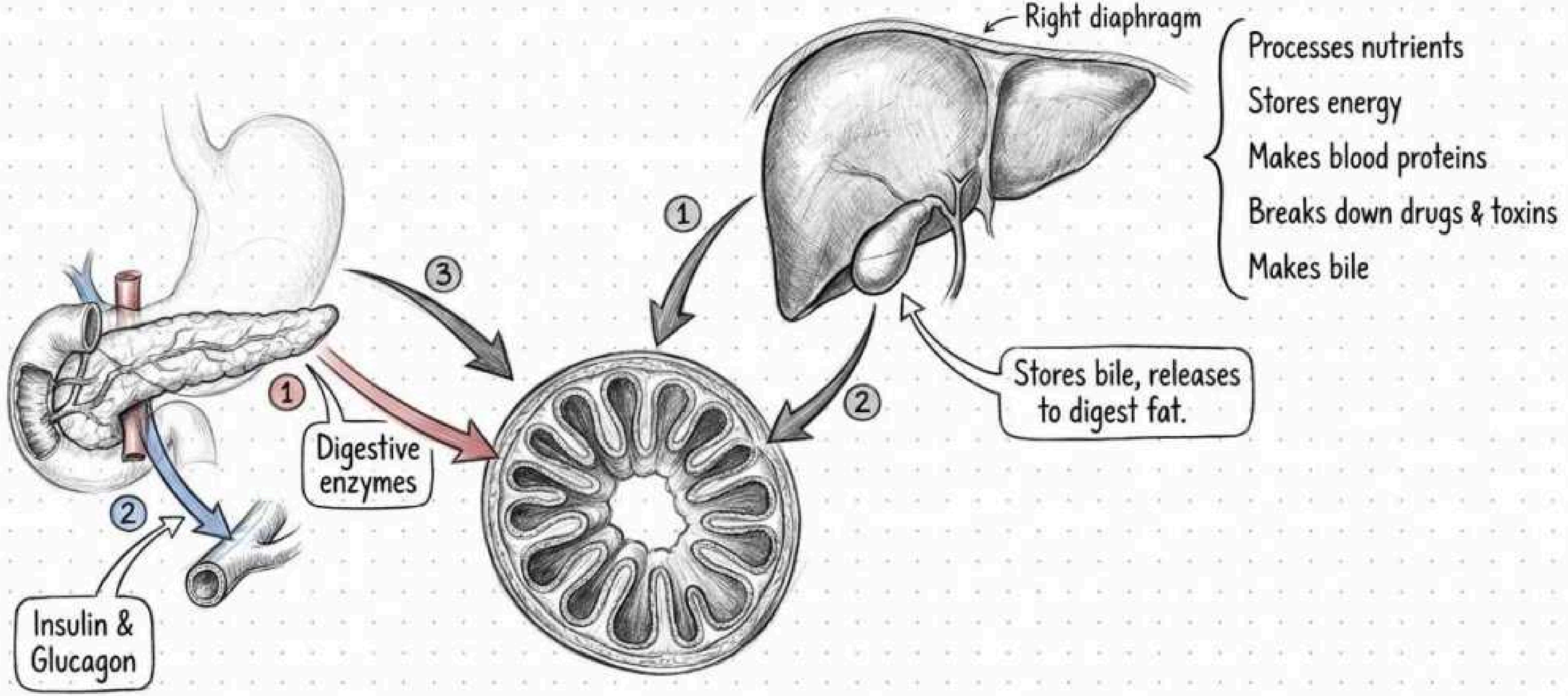
¶4.5



$$\text{Area} = \pi r^2 \times (\text{millions of villi}) = \text{Maximum Absorption}$$

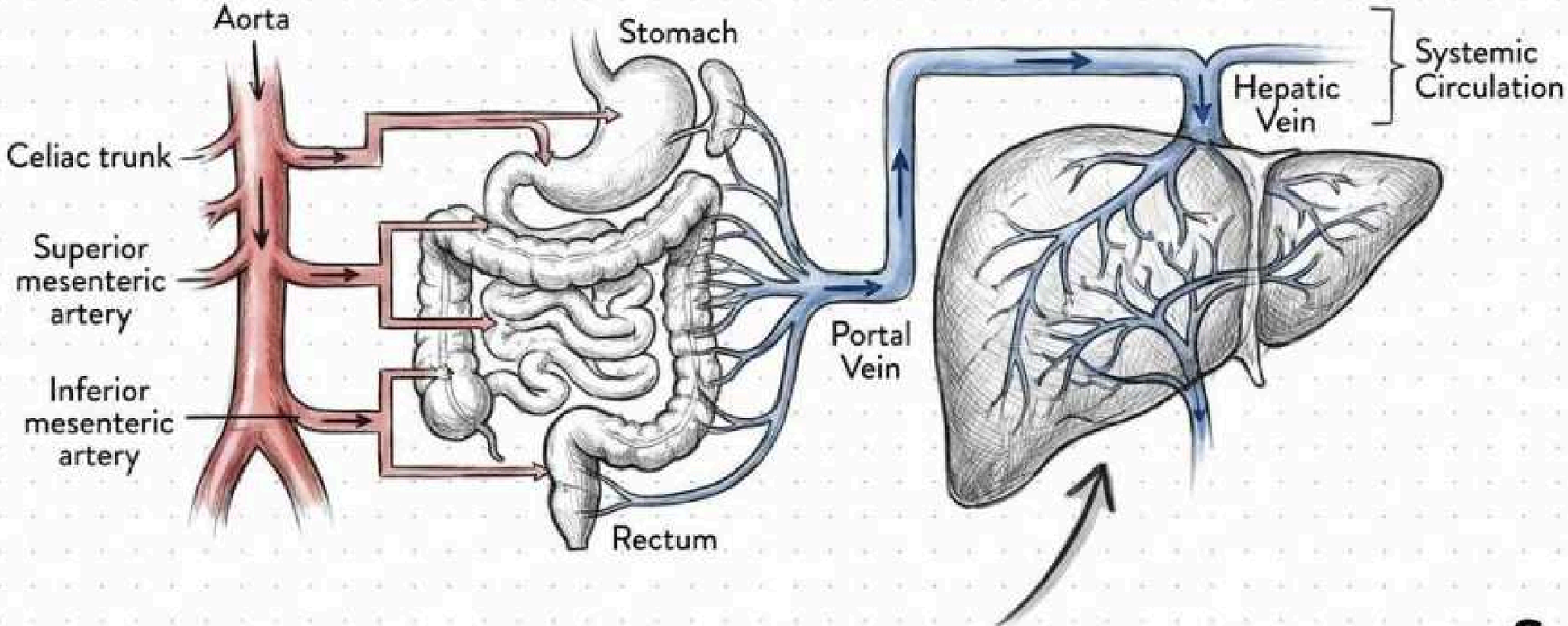
Three Accessory Organs Supply the Digestive Hub

¶ 4.6



The Portal Circulation Operates as a Biological Filtration Circuit

¶ 4.7



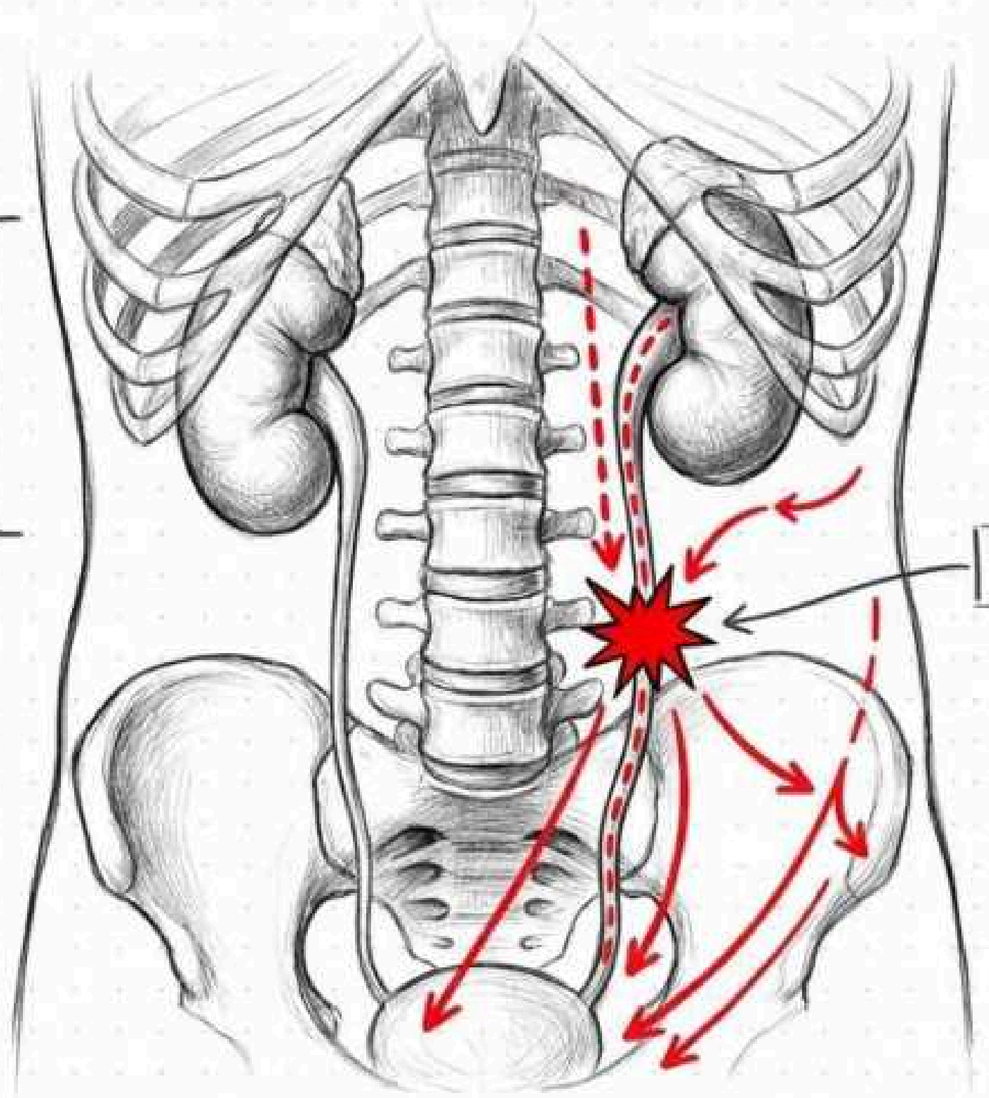
Nutrients + Toxins → Portal Vein → LIVER → Processing → Systemic Circulation

The liver gets first pass at processing meals and managing drugs.

The Renal System Regulates Water and Radiates Distinct Pain

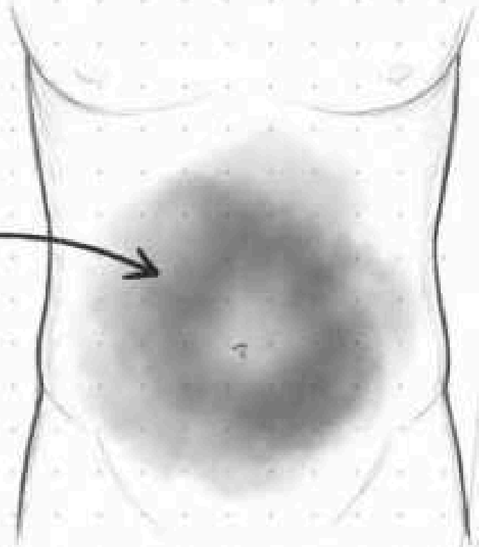
¶4.8

Filters blood, removes waste, adjusts water/salt.



Embryonic Wiring Dictates the Nature of Abdominal Pain

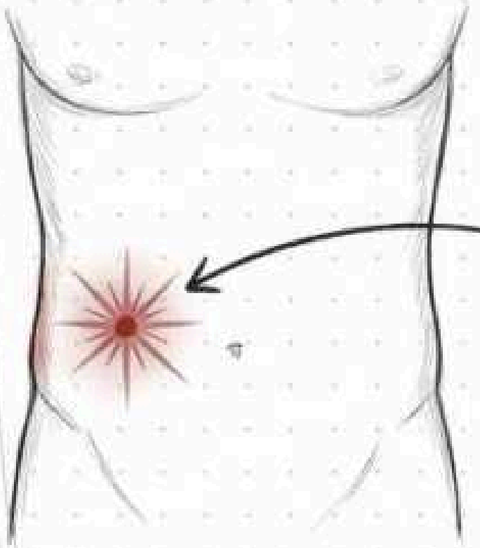
Organ Origin



Vague, diffuse pain

Organs keep embryonic midline nerve connections, resulting in vague, dull pain felt centrally.

Wall Lining Origin

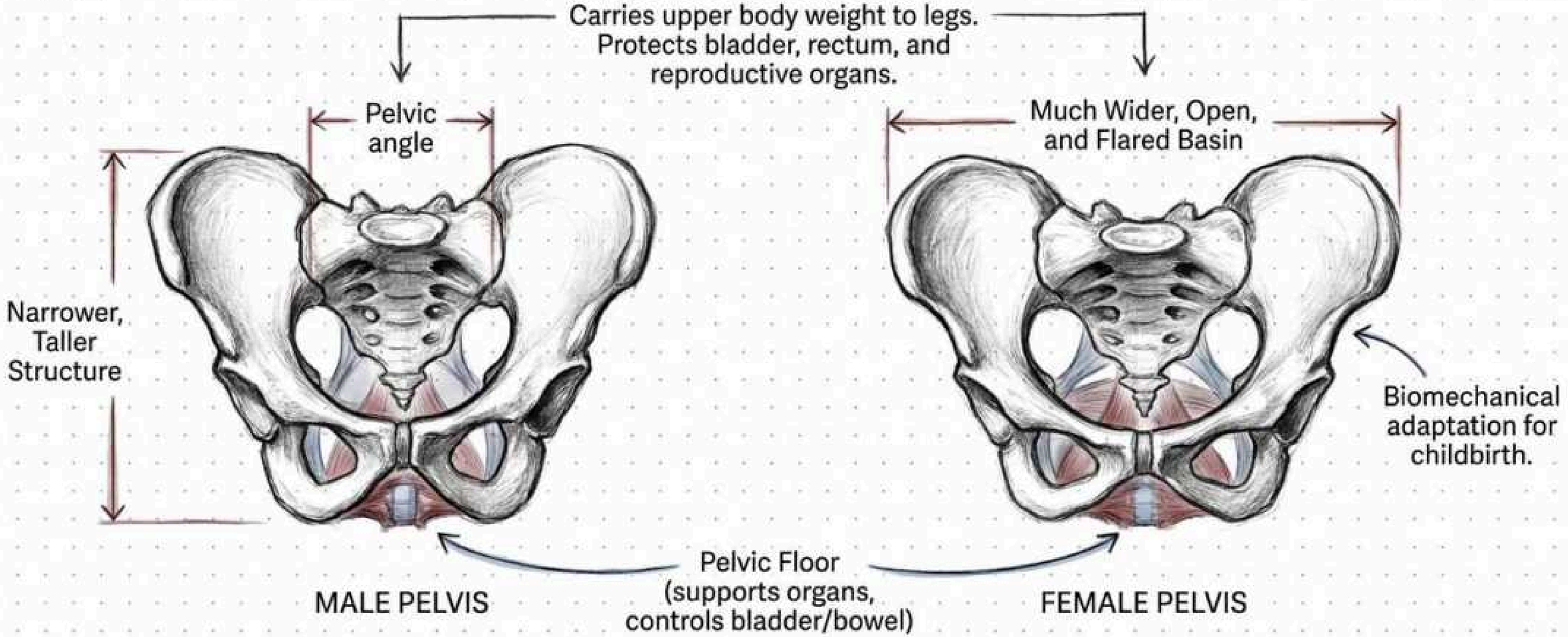


Sharp, localized pain

Inflamed abdominal lining triggers highly localized, sharp, and precise pain.

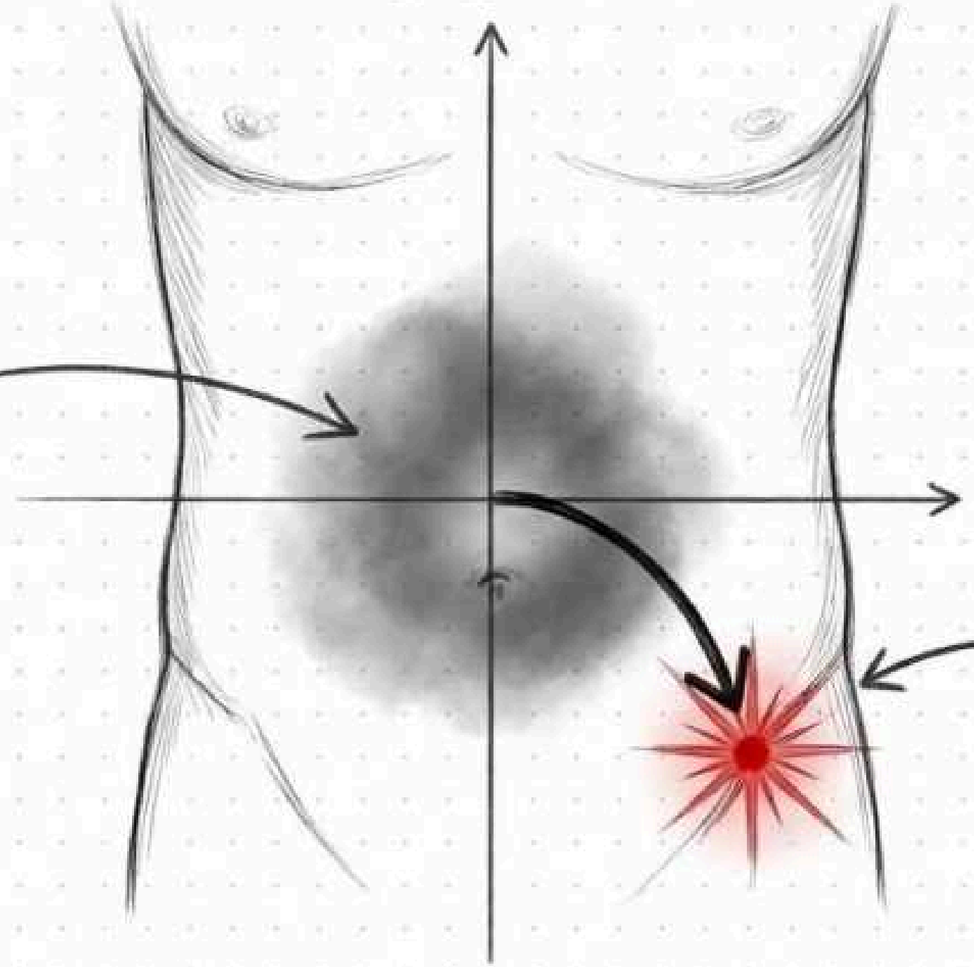
¶ 4.10

The **Pelvic Basin** Adapts for Weight Bearing and Childbirth



Anatomical Synthesis: The Migration of Appendicitis Pain

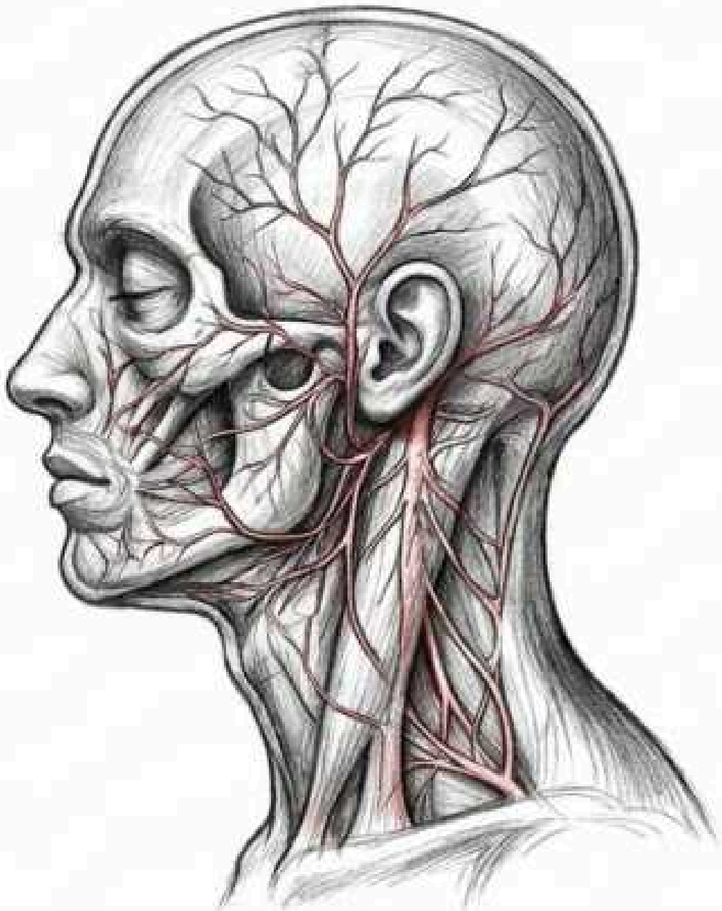
Step 1: Embryonic mid-line wiring registers vague, dull organ pain.



Step 2 (Time 2): Inflammation reaches the abdominal wall lining, triggering sharp, localized pain.

Anatomical theory directly explains clinical reality. (Educational exercise, not diagnostic advice).

Next: The Wiring of the Head and Neck



Lecture 5: Mapping the complex neural architecture above the collarbone.