



Anatomy & Histology

Aesthetic and Laser Department

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2nd lecture/Theory

The first Stage

Body cavities and its organs

BODY CAVITIES

The cavities, are spaces or compartments, of the body contain and protect delicate internal organs, or viscera.

The two main cavities are called the ventral (Anterior) and dorsal (Posterior) cavities. Figure1

1. The ventral body cavity has two main subdivisions:

the thoracic cavity and the abdominopelvic cavity.

The thoracic cavity is the more superior subdivision of the ventral cavity, and is enclosed by the rib cage.

- a. The thoracic cavity contains heart, lungs, esophagus, trachea and thymus.

It has three parts; two laterals containing the lungs surrounded by the pleural cavity, and one “Mediastinum” which contain the heart surrounded by the pericardial cavity. The mediastinum also houses esophagus and trachea.

*The diaphragm forms the floor of the thoracic cavity and separate it from the more inferior abdominopelvic cavity.

- b. The abdominopelvic cavity is the largest cavity in the body and can be divided into: the abdominal cavity, contains the kidneys, ureters, stomach, intestines, liver, gallbladder, and pancreas; and the pelvic cavity, enclosed by the pelvis and contains bladder, anus and reproductive system.

2. The dorsal body cavity includes

- The **cranial cavity**, enclosed by the skull and contains the brain,
- The **vertebral cavity (Spinal cavity)**, enclosed by the spine, and contains the spinal cord.

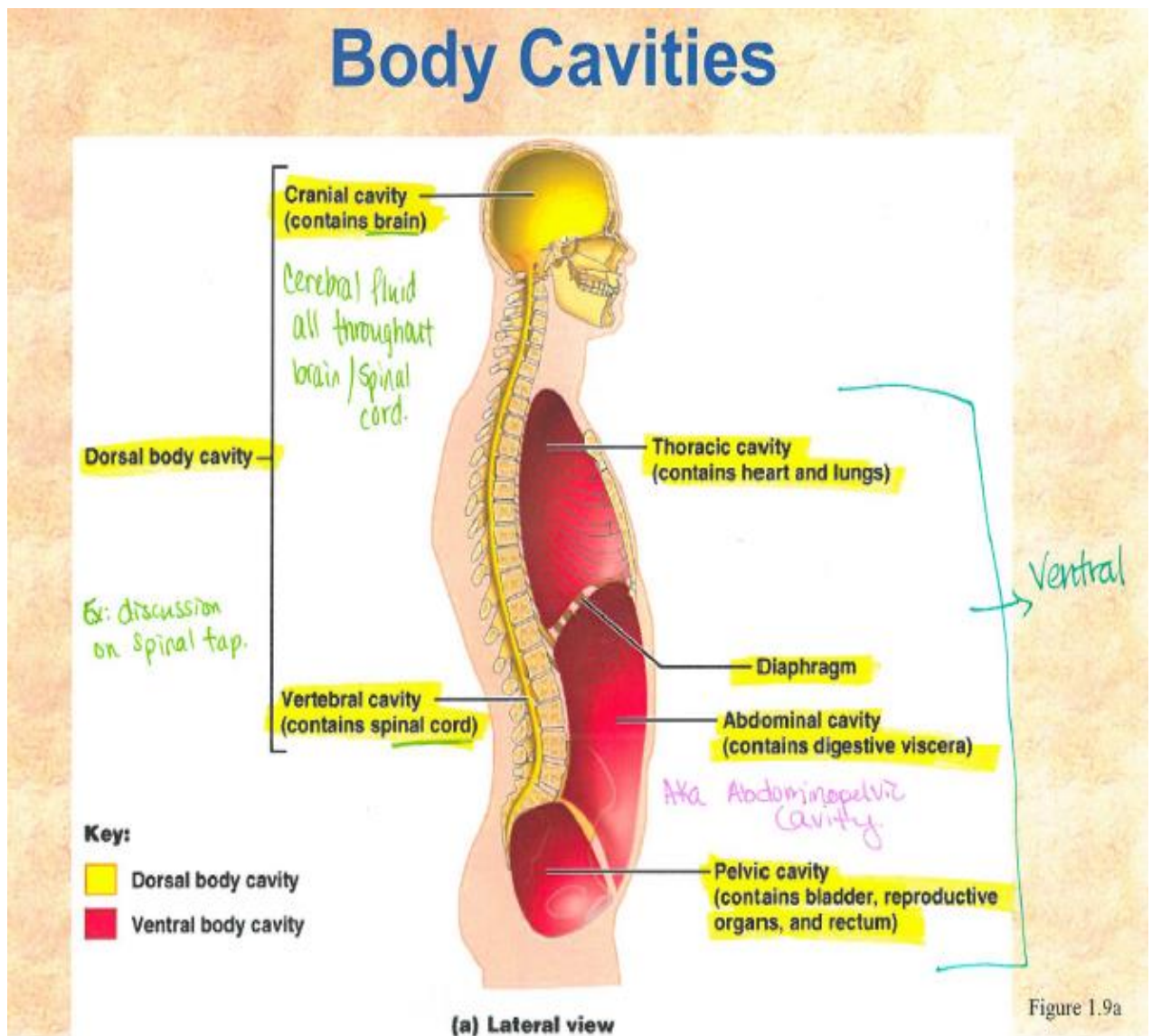
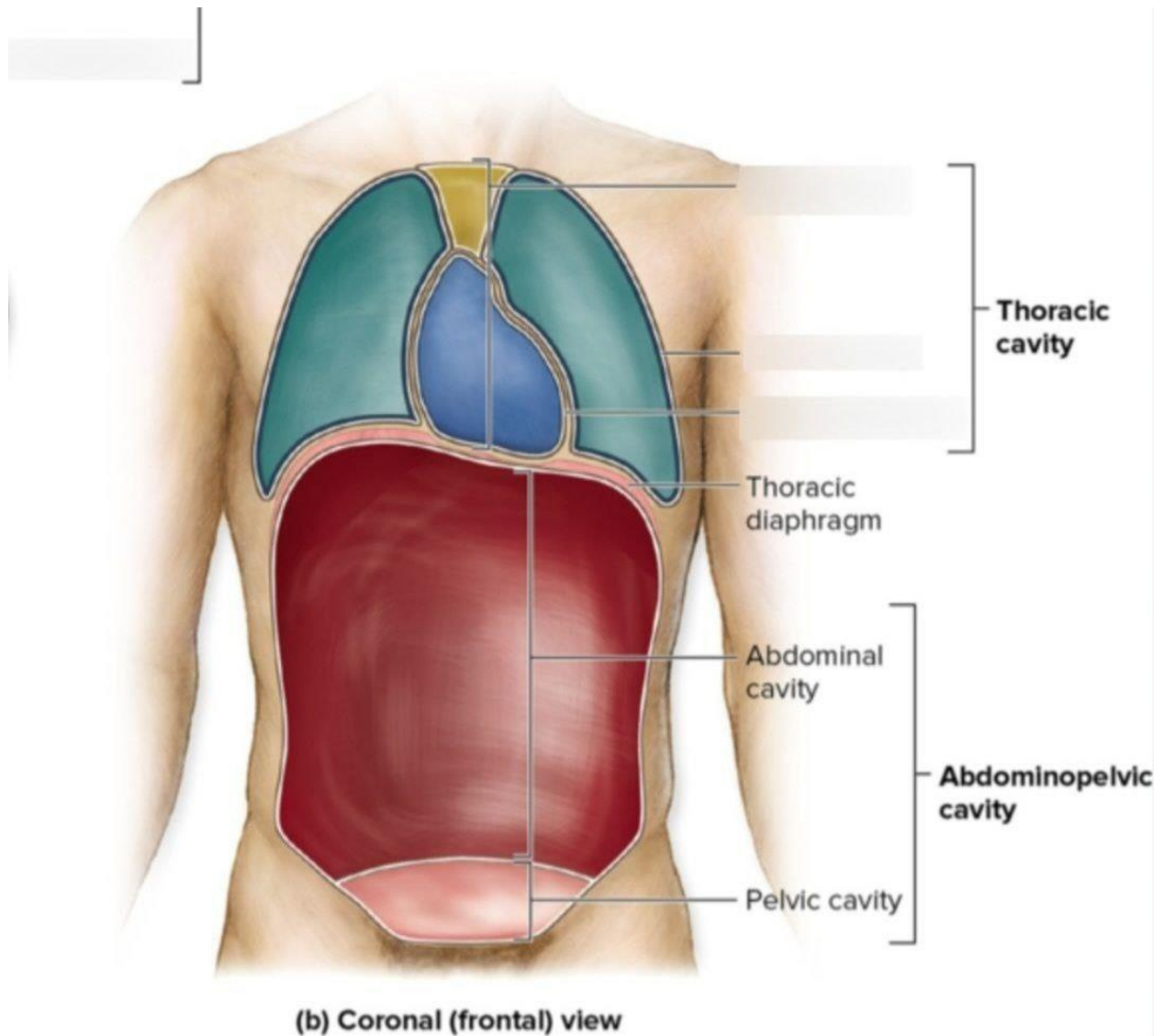
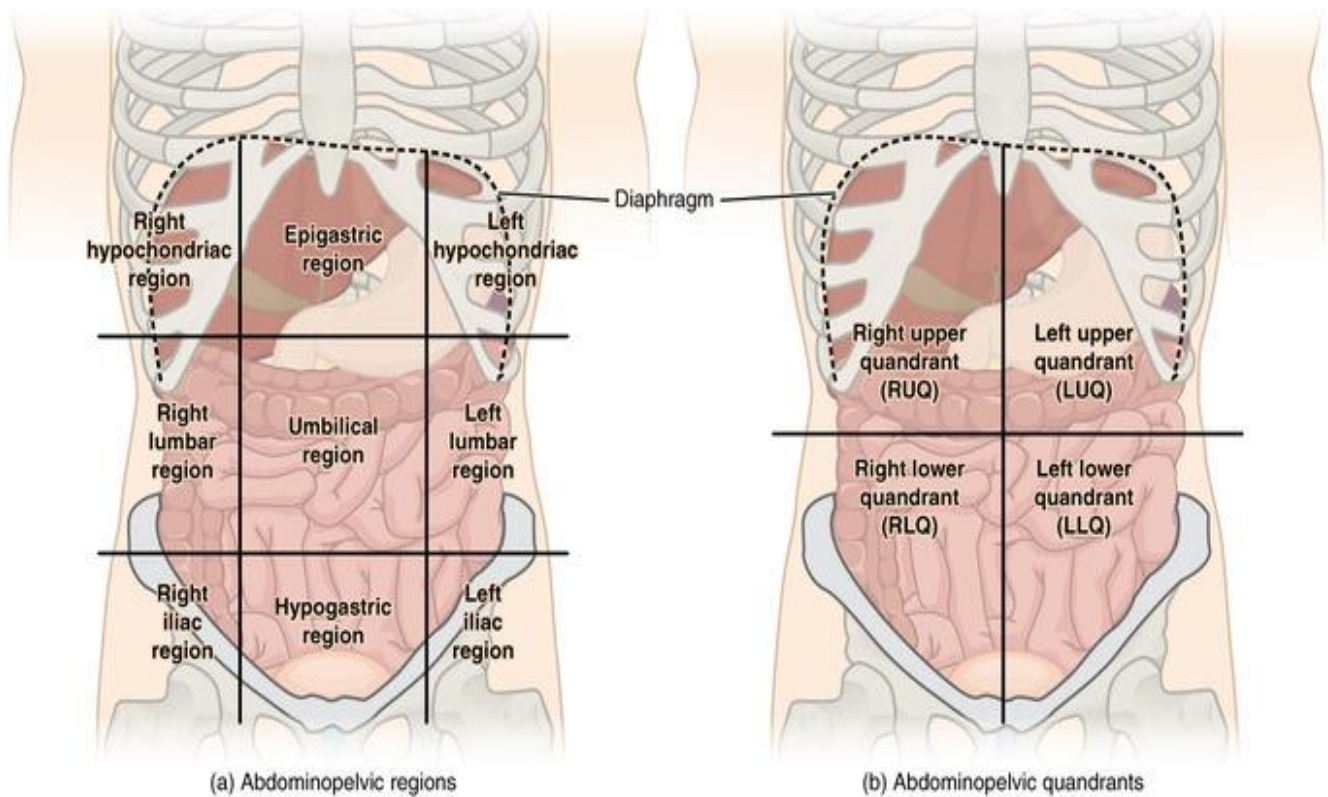


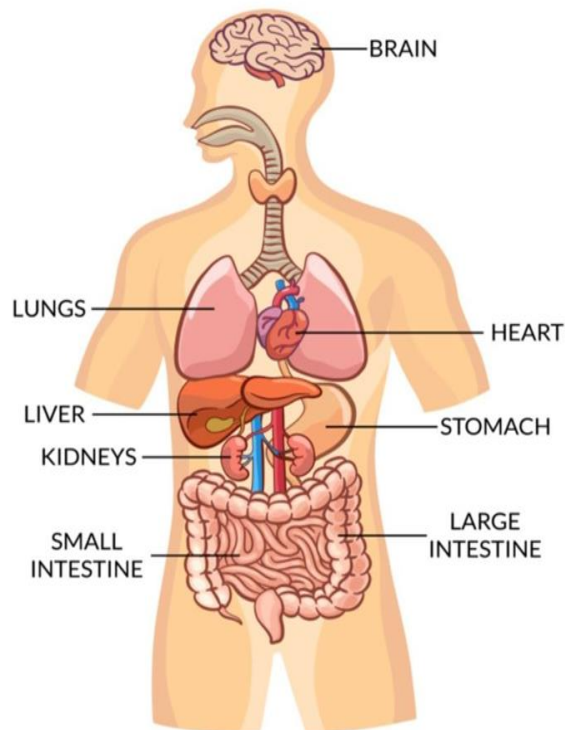
Figure1: Body cavities



The abdominopelvic region can be divided into either **nine regions** or **four quadrants**. These quadrants are defined by the intersection of the sagittal plane with the umbilical plane (the transverse plane through the navel). Clinicians use these regions to determine the organs and tissues that may be causing pain or discomfort in that region.



HUMAN INTERNAL ORGANS



(c) Internal organs of human body.

Abdominal Nine Divisions:

1.Right Hypochondriac: The prefix ‘hypo‘ means below and ‘chondro‘ means cartilage.

This region contains the right portion of the liver, the gallbladder, the right kidney, and parts of the small intestine.

2.Left Hypochondriac:

This region contains part of the spleen, the left kidney, part of the stomach, the pancreas, and parts of the colon.

3.Epigastric:

The epigastric (above stomach) region contains the majority of the stomach, part of the liver, part of the pancreas, part of the duodenum, part of the spleen, and the adrenal glands. This region pushes out when the diaphragm contracts during breathing.

4.Right Lumbar:

The right lumbar region consists of the gallbladder, the right kidney, part of the liver, and the ascending colon.

5.Left Lumbar:

The left lumbar region consists of the descending colon, the left kidney, and part of the spleen.

6.Umbilical:

The umbilical region contains the umbilicus (navel), and many parts of the small intestine, such as part of the duodenum, the jejunum, and the ileum. It also contains the transverse colon (the section between the ascending and descending colons) and the bottom portions of both the left and right kidney.

7.Right Iliac:

The right iliac region contains the appendix, cecum, and the right iliac fossa. It is also commonly referred to as the right inguinal region. Pain in this area is generally associated with appendicitis.

8.Left Iliac:

The left iliac region contains part of the descending colon, the sigmoid colon, and the left iliac fossa. It is also commonly called the left inguinal region.

9.Hypogastric:

The hypogastric region (below the stomach) contains the organs around the pubic bone. These include bladder, part of the sigmoid colon, the anus, and many organs of the reproductive system, such as the uterus and ovaries in females and the prostate in males.