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INTRODUCTION

Anatomy is the science which deals with the structure of the body from macroscopic to the microscopic level. which served as the basis for understanding the structure and functions of the human body

The term anatomy is derived from the Greek word anatome meaning to cut up.

SUBDIVISIONS OF ANATOMY

In the past, anatomy was studied mainly by dissection, but nowadays, it is studied by all possible ways and techniques like imaging, microscopy, etc. Based on this, anatomy is divided into following types:

1. Gross anatomy/topographical anatomy

2. Microscopic anatomy (histology)

3. Surface anatomy

4. Comparative anatomy

5. Physical anthropology

6. Living anatomy

7. Clinical anatomy

8. Radiological anatomy

9. Developmental anatomy/embryology

10. Genetic

1. Gross (topographical) anatomy: study on cadavers by dissection and observation of structures by naked eyes

2. Microscopic anatomy (histology): study of body structures with the help of microscope (light/electron microscope). Microscopic anatomy provides structural details of tissues and cells, which otherwise are not visible to the naked eye.

3. Surface anatomy: study of the relationship of deeper structures with skin surface; some of these structures can be seen

4. Comparative anatomy: study of changes in the form, structure and function of the different parts of the body that have taken place in the Animal Kingdom

5. Physical anthropology: study of physical characteristics of the human beings and their ancestors

6. Living anatomy: study of the structures of the body of the living human beings by inspection, the help of various medical procedures

7. Clinical anatomy: use of anatomical knowledge for diagnosis and treatment of various diseases.

8. Radiological anatomy: visualization of the strecture and their relations with the neighboring strecture inside the body by taking radiographs using x-rays.

9.Developmental anatomy/embryology: study of development of an individual, which begins with fertilization and ends with birth.

10. Genetics: study of the principles of heredity and variation.

11. Experimental anatomy: study of the factors that influance and determine the form, structure and function of the different parts of the body

Contributors to the science of anatomy

Contributor	contribution
Menes	Wrote the first anatomy manual
Hippocrates	Hippocratic oath. Called the Father of Medicine
Harvey	Demonstrated motion of blood in heart and vessels
Leeuwenhoek	Refined microscope. Described cells and tissues
Malpighi	Regarded as the Father of Histology
Robert Hooke	Coined the term 'cell'
Mendel	Regarded as the Father of Genetics
Röentgen	Discovered x-rays
Watson and Crick	Discovered the structure of DNA
Sushurate	Recorded weight of tongue and length of the intestine

Conventionally, the body is divided into Conventionally, the body is divided into

1. Head and neck
2. Brain
3. Thorax
4. Abdomen
5. Upper limb
6. Lower limb

Systems of the bodies

1) Integumentary system (study of skin and its appendages)

(2) Skeletal system (study of bones)

(3) Articular system (study of joints)

4) Muscular system (study of muscles)

(5) Nervous system (study of neural tissue)

(6) Cardiovascular system (deals with heart and associated blood vessels)

(7) Lymphatic system (study of lymphoid tissue and lymph vessels)

(8) Endocrine system (study of ductless glands)

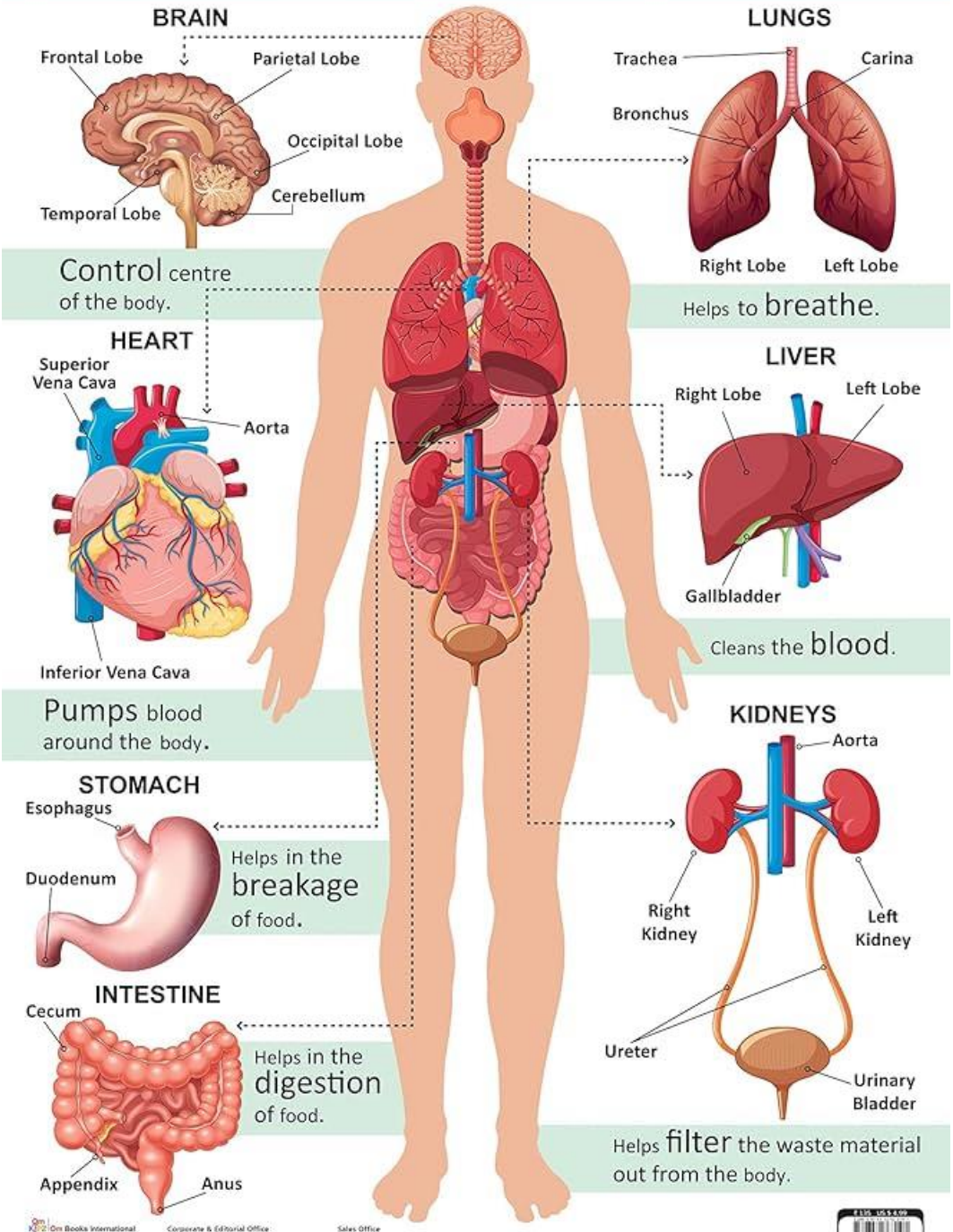
(9) Digestive system (study structures concerned with digestion)

(10) Respiratory system (study of structures concerned with respiration)

(11) Reproductive system (study of structures concerned with reproduction)

(12) Urinary system (study of structures concerned with the formation and disposal of urine)

BODY ORGAN SYSTEM



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ANATOMICAL POSITION

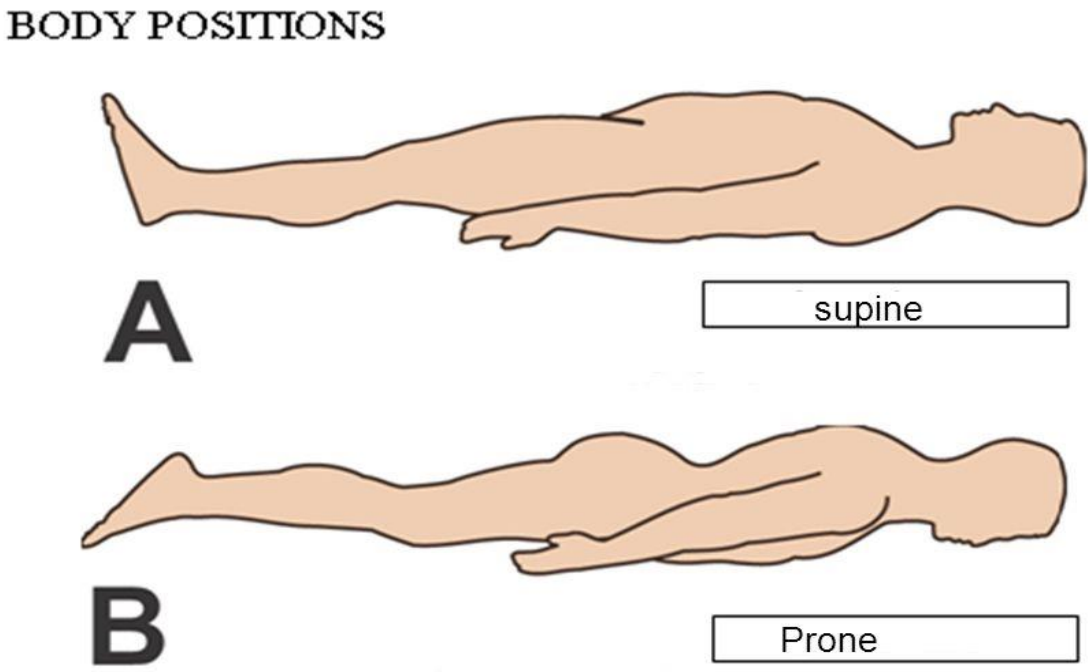
In anatomical position the body is erect, the eyes are directed forward and look straight, the upper limbs hang by the side of the body with palms of the hand turned forward and the fingers are pointed straight down, the lower limbs, including the feet, are parallel to one another with feet flat on the floor and toes pointing forwards

OTHER POSITIONS OF THE BODY

1. Supine position: the person lies on the back with face directed upwards

2. Prone position: the person lies on his belly (abdomen) with his face directed downwards

3 Lithotomy position: the person lies supine. The hips and knees are semiflexed

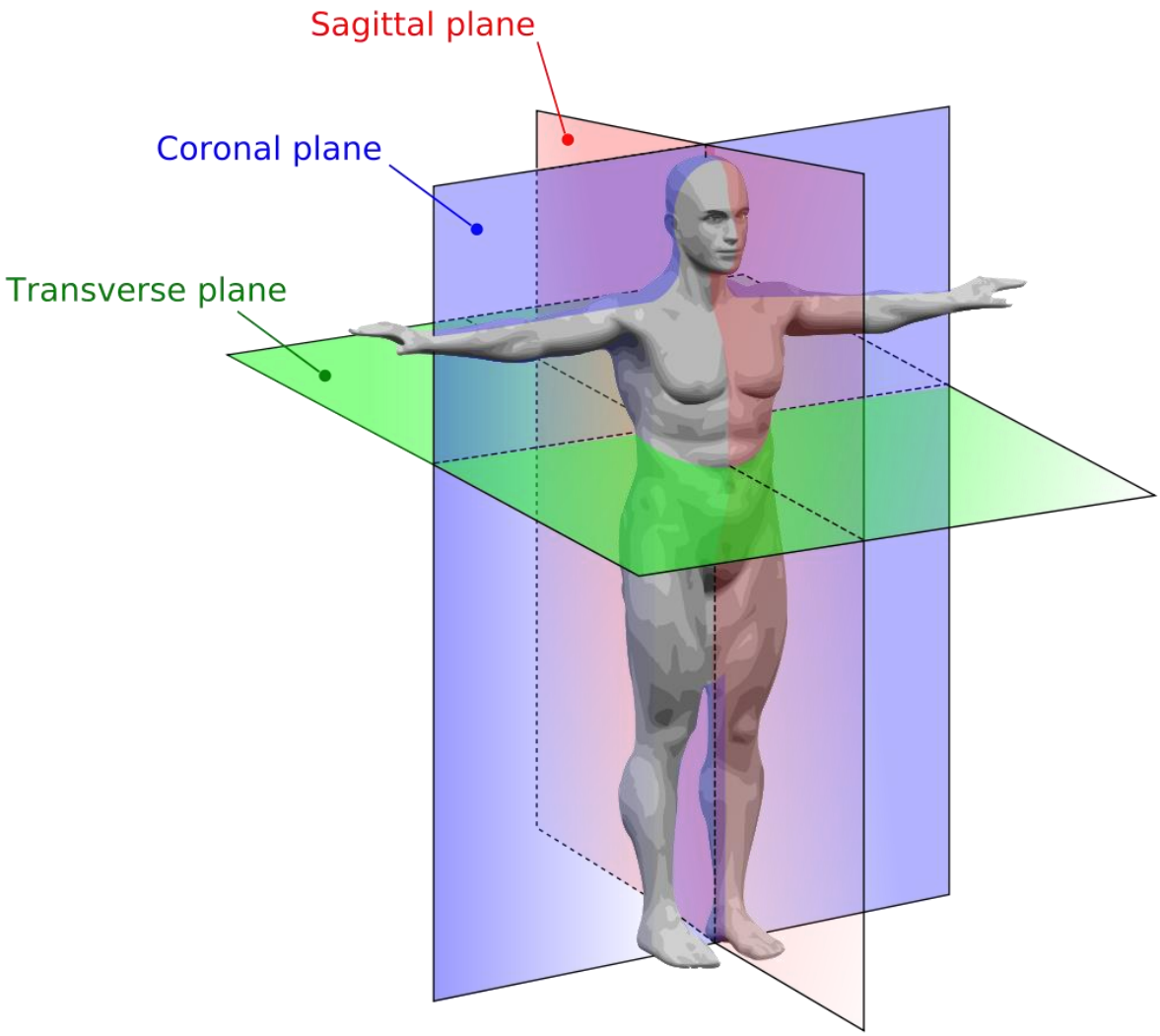


ANATOMICAL PLANES OF THE BODY

1. sagittal median plane: It passes lengthwise, longitudinally through the sagittal suture (midline)

2. Coronal plane: divides the body into front and back portion.

3. Transverse plane : divides the body at any level into upper and lower portions



ANATOMICAL TERMS

1. Anterior: towards the front aspect of the body.

2. Posterior: towards the back aspect of the body.

3. Superior: towards the head.

4. Inferior: towards the feet.

5. Central: towards the center of the mass of the body.

6. Peripheral: away from the center of the lass of the body.

7. Median: along the midsagittal (median) plane.

8. Medial: towards the median plane.

9. Lateral: away from the median plane.

10. Intermediate: between medial