

Anatomical position

Planes of the body

The *median plane* – vertical plane passing through the middle of the body divides body (or organ) into two equal portions (halves).

The *sagittal planes* – vertical planes passing through the body parallel to median plane. They divide the body into unequal right and left portions.

The *frontal (or coronal) planes* – passing through the body at right angles to median plane, dividing body into anterior (front) and posterior (back) portions.

The *transversal (horizontal) planes* – passing through the body at right angles to the median and frontal planes and divides the body into upper and lower portions.

Basic of the anatomical nomenclature

Vertical axis:

Cranialis (superior, above) – toward the head

Caudalis (inferior, below) – toward the feet (cauda = tail)

Transversal axis:

Medialis – toward the median plane

Lateralis – farther away from the median plane, from the middle

Medius (intermediate) – in the midline

Medianus – within the median plane

Sagittal axis:

Frontalis (anterior) – nearer to the front of the body

Dorsalis (posterior) – nearer to the back of the body

Limbs:

Proximalis – nearest from the trunk or point of origin of a limb

Distalis – farthest from the trunk or point of origin of a limb

Upper limb:

Radialis (lateralis) – farther away from the median plane

Medialis (ulnaris) – toward the median plane

Palmaris – palm side of the hand

Dorsalis – back side of the hand (in this case opposite of palmar)

Lower limb:

Tibialis (medialis) toward the tibia

Fibularis (lateralis) toward the fibula

Plantaris – on or toward the sole of the foot

Dorsalis – toward the back (in this case opposite of plantar)

Some of the most used terms and their meaning:

Corpus – a body

Trochlea – a pulley

Superior – upper

Inferior – lower

Dexter – on the right side

Sinister – on the left side

Pars – a part

Crista – a crest

Impressio – an impression, imprint

Facies articularis – an articular surface, area

Substantia compacta – compact bone
Substantia spongiosa – spongy bone
Medulla ossium – bone marrow
Cavum medullare – marrow cavity
Diploe – spongy bone inside of plane bones
Arteria – an artery, a. (aa.)
Vena – a vein, v. (vv.)
Nervus – a nerve, n. (nn.)
Thorax – a trunk, chest
Musculus – a muscle, m. (mm.)
Sulcus – a groove
Incisura – a notch
Canalis – a canal
Fossa – a pit, hollow
Fovea – a pit, hollow
Processus – a projection, prominence
Spina – a thorn
Tuberculum – a tubercle
Tuber – a torus
Tuberositas – a tuberosity
Foramen – an opening, orifice, gap
Facies – a facet, surface
Articulus – a joint
Os, ossis, ossa – a bone, bones
Externus – external
Internus – internal
Superficialis – superficial
Profundus – deep
Caput – a head
Capitulum – a small head
Collum, cervix – a neck

Parts of the human body

head – *caput*

neck – *collum (cervix)*

trunk – *truncus*: chest – *thorax*

belly – *abdomen*

basin – *pelvis*

back – *dorsum*

upper limb – *membrum superius*

arm – *brachium*

forearm – *antebrachium*

hand – *manus*

lower limb – *membrum inferius*

thigh – *femur*

leg – *crus*

foot – *pes*

Radiology and anatomy

A highly penetrating beam of x-rays „transluminates“ the patient, showing tissues of differing densities on x-ray film.

A tissue or organ that is relatively dense absorbs (stops) more x-rays than a less dense tissue.

Simple X – ray (native)

X– ray with contrast materials

a) positive (iodide preparations, barium meal)

b) negative (air, gases)

Projection according to the course of x-ray (anteroposterior, lateral)