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Anatomical terms of location and regions of human body

From Mantropedia

Standard anatomical terms of location are used to unambiguously describe the anatomy of animals, including humans. The terms, typically derived from Latin or Greek roots, describe something in its standard anatomical position. This position provides a definition of what is at the front (anterior), behind (posterior) and so on. As part of defining and describing terms, the body is described through the use of anatomical planes and anatomical axes.

The meaning of terms that are used can change depending on whether an organism is bipedal or quadrupedal. Additionally, for some animals such as invertebrates, some terms may not have any meaning at all; for example, an animal that is radially symmetrical will have no anterior surface, but can still have a description that a part is close to the middle (proximal) or further from the middle (distal).

International organisations have determined vocabularies that are often used as standard vocabularies for subdisciplines of anatomy, for example, Terminologia Anatomica for humans, and Nomina Anatomica Veterinaria for animals. These allow parties that use anatomical terms, such as anatomists, veterinarians, and medical doctors to have a standard set of terms to communicate clearly the position of a structure.

0D CENTER

- 0D body center

1D AXES

- body lines

Organisms where the ends of the long axis are distinct. (Paramecium caudatum, above, and Stentor roeselii, below.) The axes of the body are lines drawn about which an organism is roughly symmetrical.[8] To do this, distinct ends of an organism are chosen, and the axis is named according to those directions. An organism that is symmetrical on both sides has three main axes that intersect at right angles.[3] An organism that is round or not symmetrical may have different axes.Example axes are:

1. The anteroposterior axis
2. The cephalocaudal axis
3. The dorsoventral axis.

2D PLANES

- body planes

- 2d plane locations
- Anatomical planes in a human
- Main article: Anatomical plane

- Anatomical terms describe structures with relation to four main anatomical planes:

1. The median plane, which divides the body into left and right. This passes through the head, spinal cord, navel, and, in many animals, the tail.
2. The sagittal planes, which are parallel to the median plane.
3. The frontal plane, also called the coronal plane, which divides the body into front and back.
4. The horizontal plane, also known as the transverse plane, which is perpendicular to the other two planes. In a human, this plane is parallel to the ground; in a quadruped, this divides the animal into anterior and posterior sections.

3D REGIONS

- Body regions
- 3d region locations

ANALOGICAL POSITIONS IN 2D AND 3D SPACES (COMPARISION)

- Front (3D) is Right (2D) / Left (2D)
    - anterior in 3d space is right / left in 2d space
    - posterior in 3d space is right /left in 2d space
- Back (3D) is left (2D) / Right (2D)
- Height (z axis) in 3d becomes Height (y Axis) in 2d
    - Up (3d) is up
    - down (3d) in down
    - above (3d) is above
    - below (3d) is below
    - medial(3d) is medial
    - lateral (3d) is lateral
    - proximal (3d) is proximal
    - distal (3d) is distal (2d)
    - center (3d) is center (2d)
    - periphery (3d) is periphery in (2d)

COMPLEX POSITIONS

	superior	inferior	medial	lateral / marginal	internal	external	dorsal / posterior	ventral / anterior
Anterior	anterosuperior	anteroinferior	anteromedial	anterolateral / anteromarginal	anterointernal		Sagittal plane	anteroventral
Posterior	posterosuperior	posteroinferior	posteromedial	posterolateral / posteromarginal				
Ventral			ventromedial	ventrolateral				
Dorsal			dorsomedial	dorsolateral			dorso-posterior	dorso-anterior
Centro			centromedian					

Intermedio			intermediomedial	intermediolateral				
Ipsi			Ipsimedial	Ipsilateral				
Contra			Contramedial	Contralateral				
Co				Collateral				
Superficial							Superficial posterior	superficial anterior
Deep							Deep posterior	Deep anterior
dexter								
sinister								

RELATIONS BETWEEN DOTS , AXIS AND PLANES

- Special; with relation to the several parts of any thing, consider'd as a
  - dot , center , origin
  - Line; the interjacent part: or those which are most remote from each other.
    - Axial , axis , central line
  - Planes , in relation to central planes
    - dot in a 2d plane is called center
    - line in a 2d plane
      - central axis , radius , diameter
    - plane in a 2d plane is called adjacent planes
  - Regions , in relation to Central regions
    - adjacent regions
- Distance in a 2d plane or 3d region
  - distance from main axis being either
    - proximal , near
    - Distal , far
  - facing towards and nearer or away from and farther axis
    - medial
    - lateral