

Positioning Terminology

The standard anatomical position is assumed, with the individual standing facing the observer with feet turned slightly outwards and hands abducted away from the body and palms flat and visible. In respect to this, several terms can be discussed from this starting position to describe positioning and relations of structures.

Relational terms

- Anterior towards the front of the body; alternative term is ventral
- Posterior towards the back of the body; alternative term is dorsal
- Medial towards the midline of the body
- Lateral away from the midline towards the side of the body
- Proximal towards the origin of the structure
- Distal away from the structure's origin (or further from the body)
- Superior towards the head (cranial or cephalad) or above
- Inferior towards the feet (caudal/caudad) or below
- Oblique from the anatomical position rotation of the body in either direction

Anatomical planes

- Sagittal The mid or median sagittal plane vertically divides the body into two equal (right and left) halves.

Other sagittal planes are subsequently parallel with this.

- Coronal A second vertical plane that can pass through the body to divide it into anterior or posterior sections lying at right angles to the mid-sagittal plane.
- Transverse These are also termed axial planes; the transverse plane divides the body into superior and inferior sections so generating horizontal cross-sections.

Body movements

Understanding body movements is important so that the correct position is adopted for images that may be produced.

- Flexion bending a joint to bring the components closer to each other
- Extension stretching of a joint to separate or elongate joint components relative to each other
- Supination a movement that allows the anterior surface to lie upwards
- Pronation a movement that allows the anterior surface to lie downwards
- Adduction movement of a limb towards the midline (or closer to the body)
- Abduction movement of a limb away from the midline
- Inversion rotation of a joint towards the midline
- Eversion rotation of a joint away from the midline
- Internal rotation rotation towards the centre of the body
- External rotation rotation away from the centre of the body
- Decubitus to lie on a surface of the body and direct a horizontal beam X-ray toward the patient, e.g. dorsal decubitus is to lie on the back with image receptor alongside the patient and effectively a lateral projection is generated by the horizontal ray. Lateral decubitus would have the patient lying on their side.