Department of
Radiology Techniques
The Second Stage



# Terminology

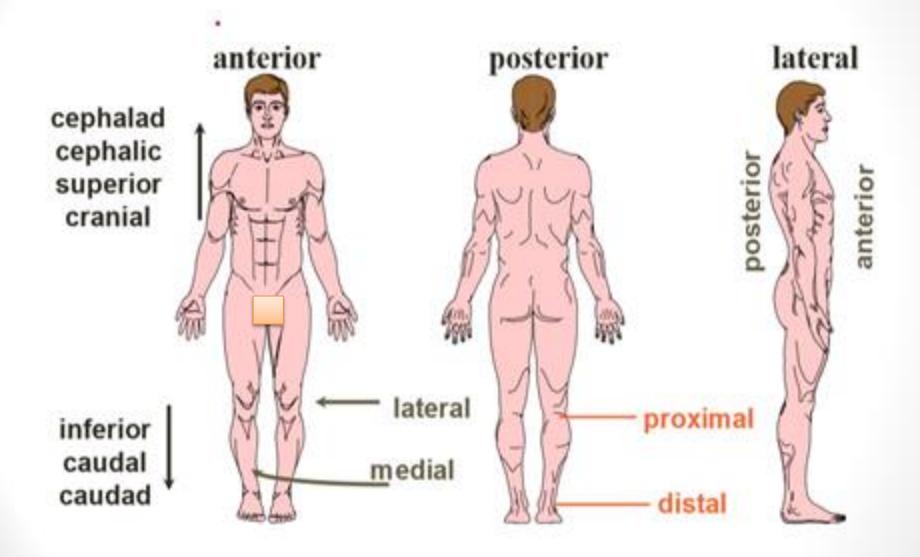
Lecture 1

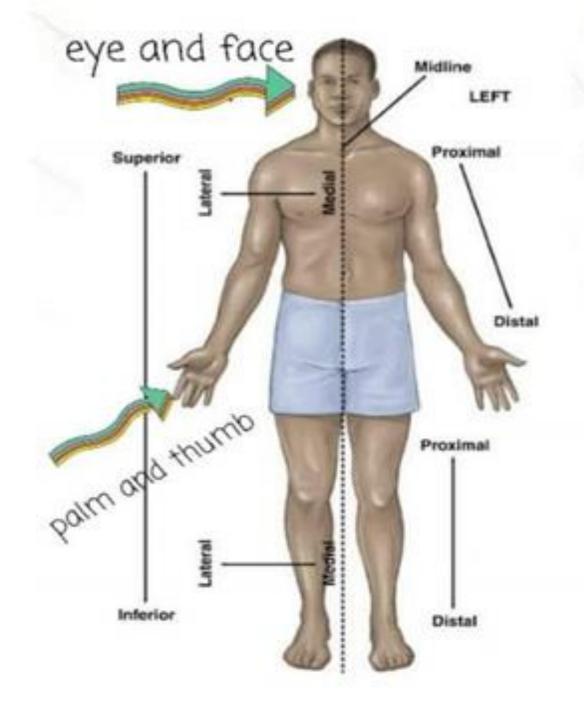
Tariq Nadhim Jassim Assist.Lecturer

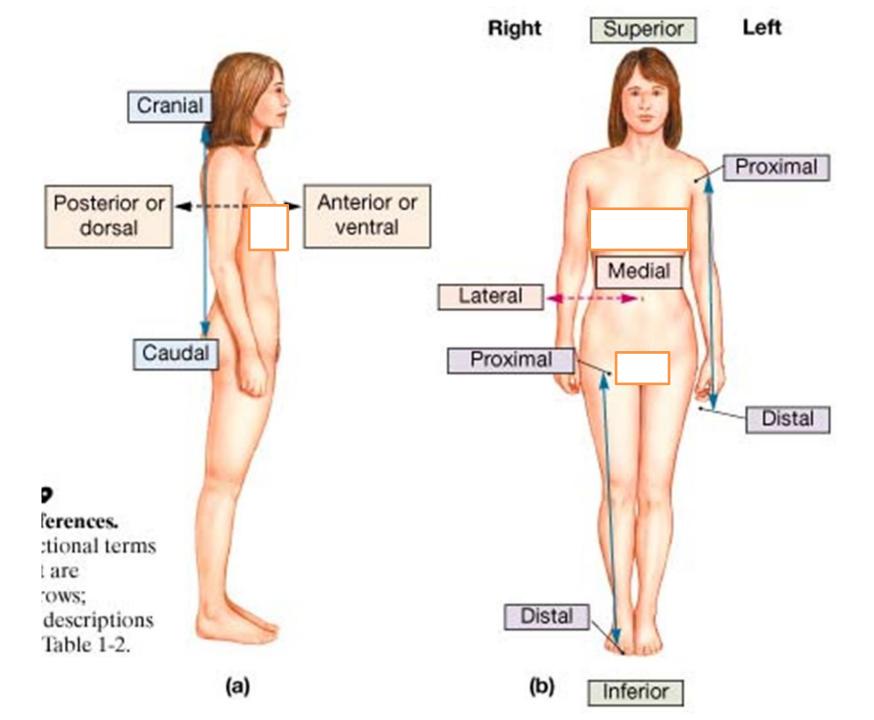
### Patient aspect

- 1. Anterior: Towards the front
- 2. *Posterior*: Towards the back
- 3. *Superior*: Towards above
- 4. *Inferior*: Towards below
- 5. *Medial*: Towards midline or median plane
- 6. Lateral: Away from median plane
- 7. Ventral: Front of the body, i.e. toward abdomen
- 8. *Dorsal*: Towards the back
- 9. *Cranial*: Towards the Head
- 10. Rostral: Same as cranial
- 11. *Caudal*: Towards the Tail
- 12. *Proximal*: Close to the center (origin)
- 13. *Distal*: Away from the center (origin)

## Directional Terms



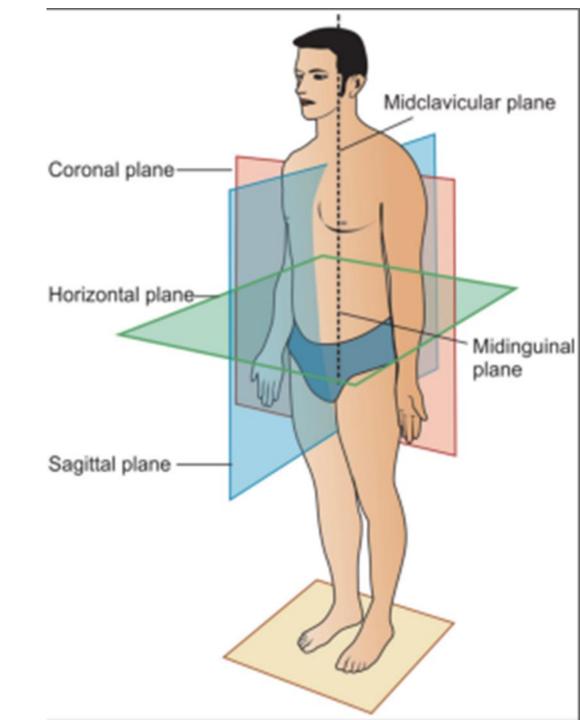




### **Planes of the Body**

### Planes:

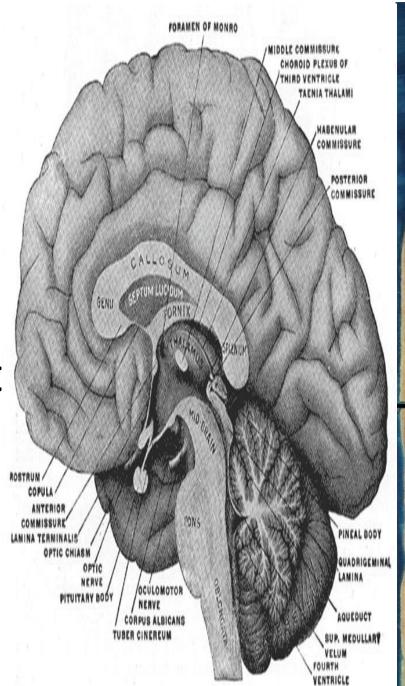
are imaginary flat surfaces that are used to divide the body or organs into definite areas



# 1-Median plane:

(Sagittal plane)

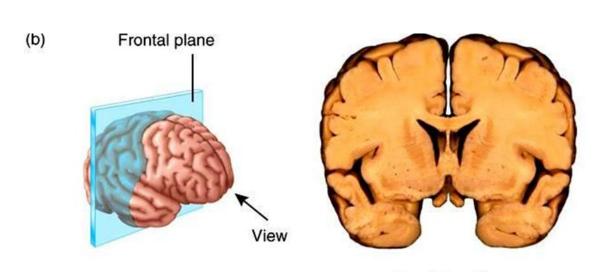
It divides the body vertically into equal right and left halves.





# 2. Coronal plane: (frontal plane)

It is the vertical plane at right angle to the median plane. Divides the body into anterior and posterior parts

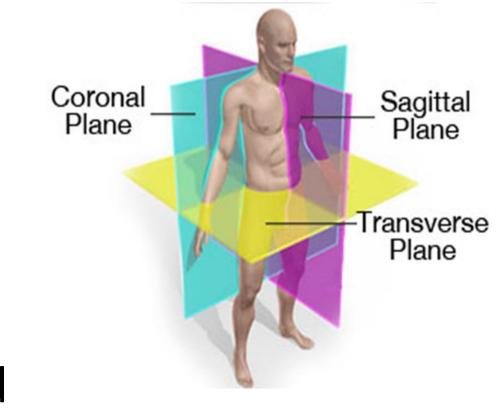


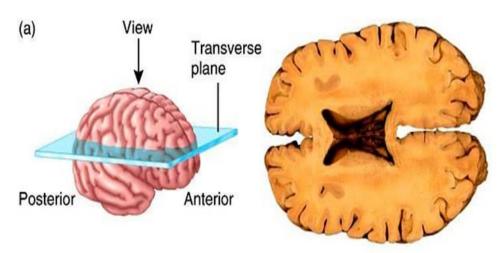


Frontal section

# 3. Horizontal plane: (Transverse plane)

It is the transverse plane of the body at right angle to the median (sagittal) and coronal planes. It divides the body into upper and lower parts

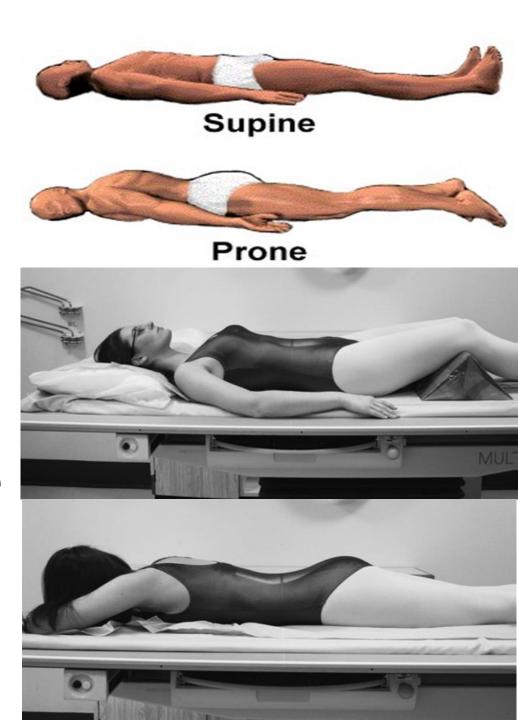




Positioning terminology

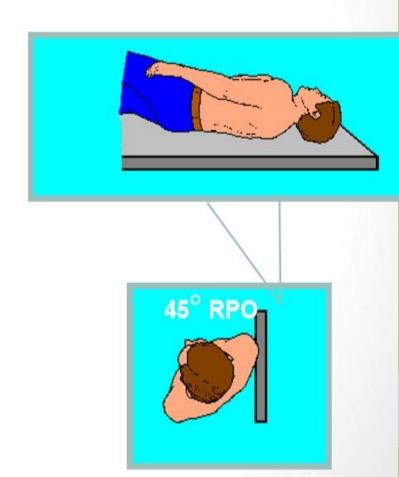
If the body is lying face down, it is in the prone position.

If the body is lying face up, it is in the supine position.



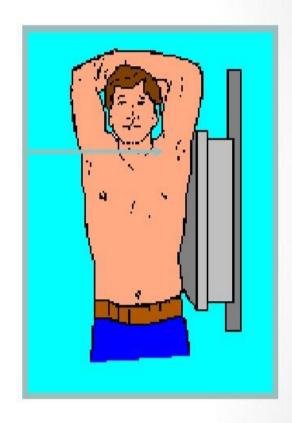
## Oblique (Erect or Recumbent)

- Position when the body is rotated so that the MS plane is neither \(\pri\) nor \(\psi\) to the film but at an angle
- Exact position is indicated by the surface closest to the film and the angle of rotation
- May be erect or recumbent
- abbreviations:
  - RPO, LPO, RAO, LAO



# Lateral Projections

- Normally the positioning terminology is used rather than projection
  - torso and head
    - Right to left lateral projection
    - Left to right lateral projection
  - extremities
    - Mediolateral projection
    - Lateromedial projection

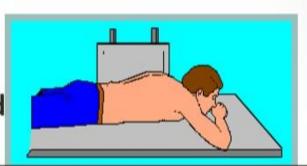


L lateral erect position R to L lateral projection

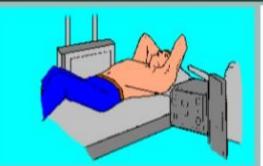
Unit III

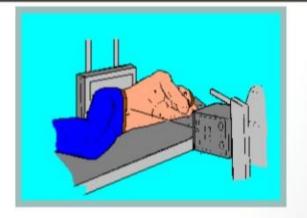
## Decubitus Positions

- Ventral decubitus
  - patient is prone & a horizontal beam is used



- Dorsal decubitus
  - patient is supine & a horizontal beam is use
- Left lateral decubitus
  - patient lying on the left lateral side & a horizontal beam is used









**Posterior-Anterior (PA) Erect Position:** 

**Left Lateral Position** 

#### Flexion:

A bending movement around a joint in a limb (as the knee or elbow) that decreases the angle between the bones of the limb at the joint.

#### Extension:

A distending movement around a joint in a limb (as the knee or elbow) that increases the angle between the bones of the limb at the joint.

#### Inversion:

The condition (as of the foot) of being turned or rotated inward.

#### **Eversion:**

The condition (as of the foot) of being turned or rotated outward.

### Supination:

rotation of the forearm and hand so that the palm faces forward or upward and the radius lies parallel to the ulna

#### **Pronation:**

rotation of the hand and forearm so that the palm faces backwards or downwards.

### Supination:

rotation of the forearm and hand so that the palm faces forward or upward and the radius lies parallel to the ulna

### Abduction:

Lateral movement away from the midline of the body.

### Adduction:

Movement towards the median plane of the body.





