

# **SNS COLLEGE OF ALLIED HEALTH SCIENCE**

Affiliated to The Tamil Nadu Dr MGR Medical University, Chennai

## **DEPARTMENT OF CARDIOPULMONARY PERFUSION CARE TECHNOLOGY**

**COURSE NAME:** Anatomy

**UNIT I** – Introduction to Anatomy

**TOPIC:** Anatomical Planes and Positions

**FACULTY NAME:** Mrs. Saranyaa Prasath

# Introduction to Anatomical Position – Empathize Stage

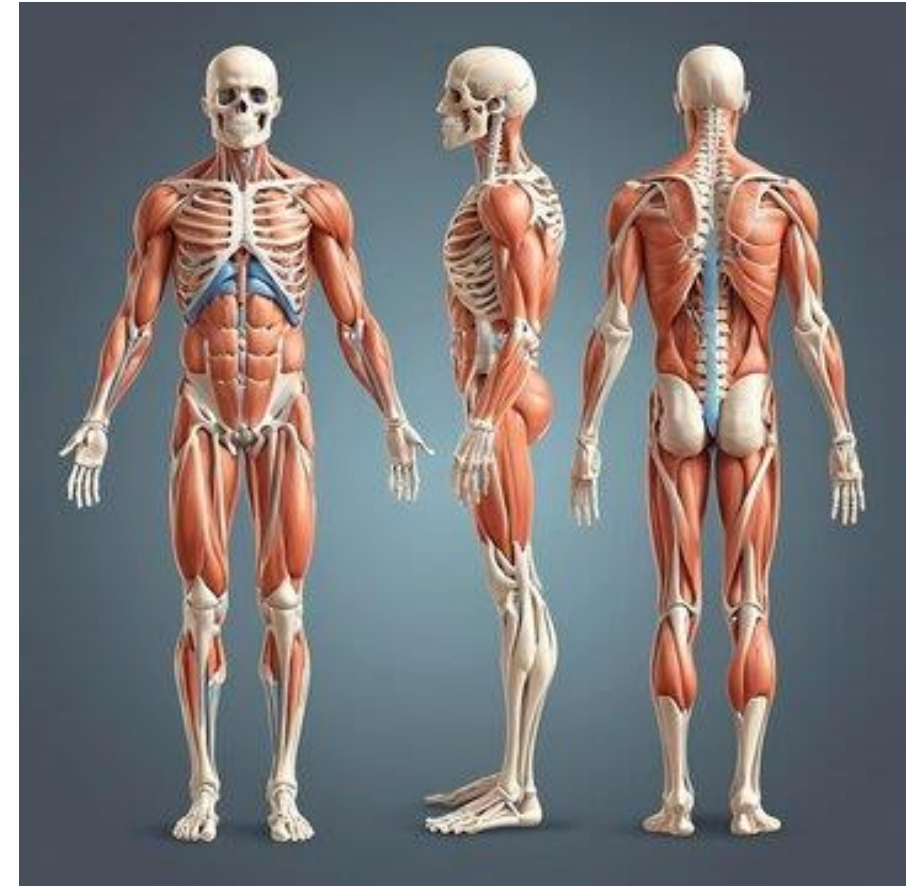
**Definition:** Standard reference position for the body

- Body standing upright
- Feet slightly apart
- Arms at sides
- Palms facing forward
- Thumbs outward
- Eyes look straight to the front
- Lower limbs are together and digits (toes) pointing forward



# Importance of Anatomical Position – Define Stage

- Basis for describing body parts and movement
- Ensures clarity in communication in healthcare
- This Defined Position helps for framing standard anatomical terminology



# Anatomical Planes - Sagittal Plane – Ideate Stage

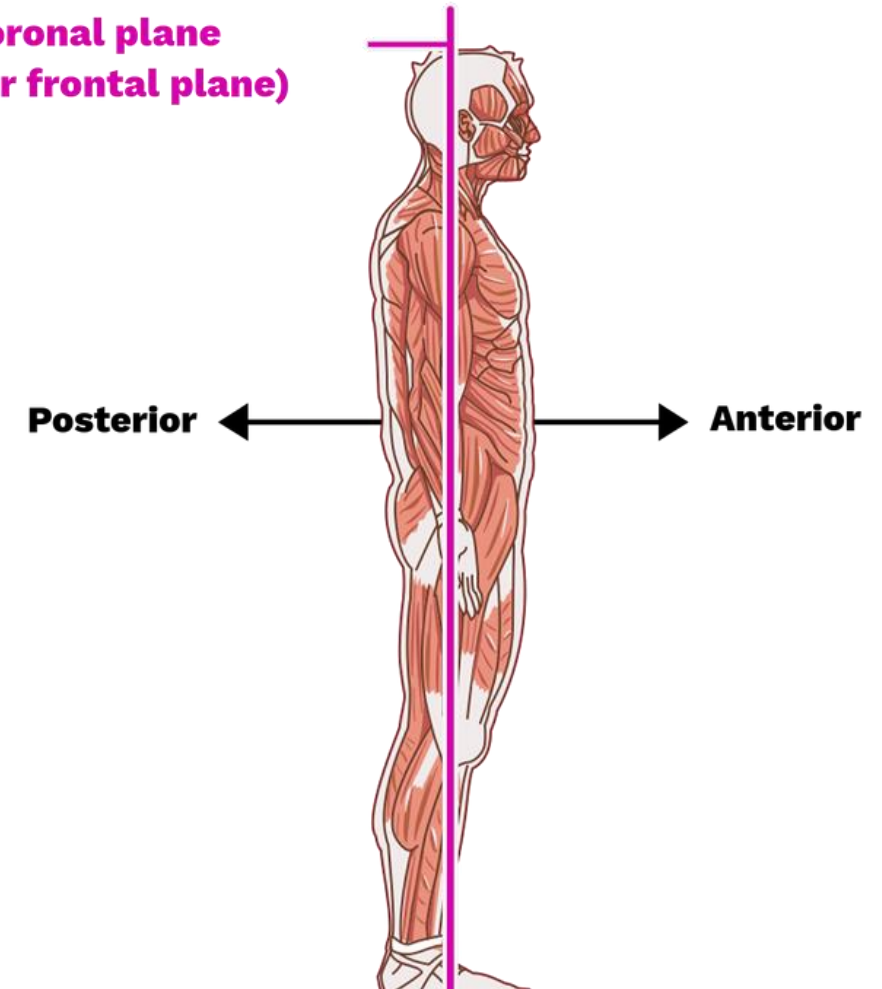
- **Vertical plane** dividing the body into left and right parts
- **Mid-sagittal (median)** divides into equal halves, parasagittal includes others parallel to it
- **Ideate** - Movements: flexion and extension
- **Visualize cutting the body to explore symmetry and movement**



# Frontal (Coronal) Plane

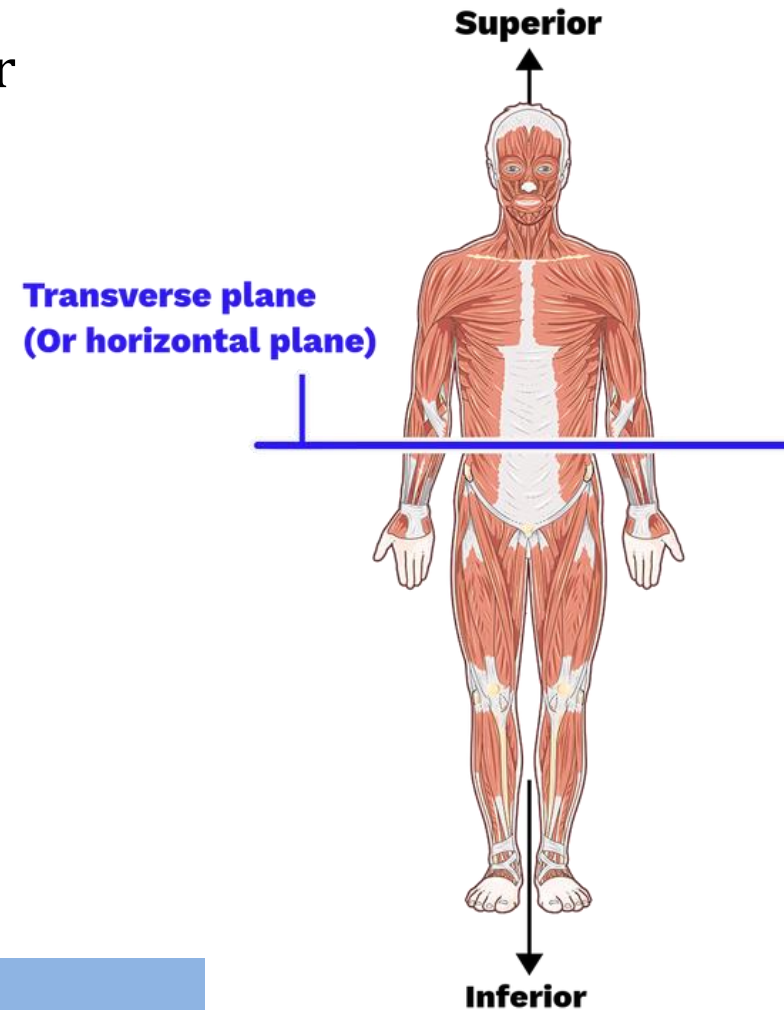
- Vertical plane dividing the body into front (anterior) and back (posterior) parts
- Ideate - Movements: abduction and adduction

**Coronal plane  
(Or frontal plane)**



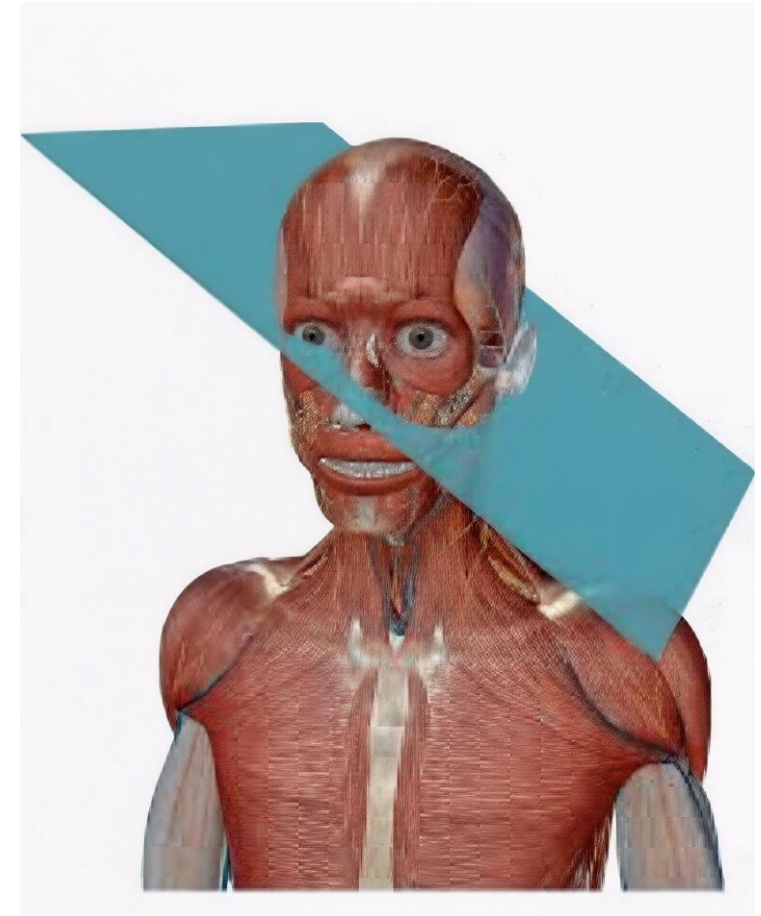
# Transverse (Horizontal) Plane

- Horizontal plane dividing the body into upper (superior) and lower (inferior) parts
- Movements: rotation
- **Prototype – Mentally “slice” the body to understand horizontal sections and internal views**



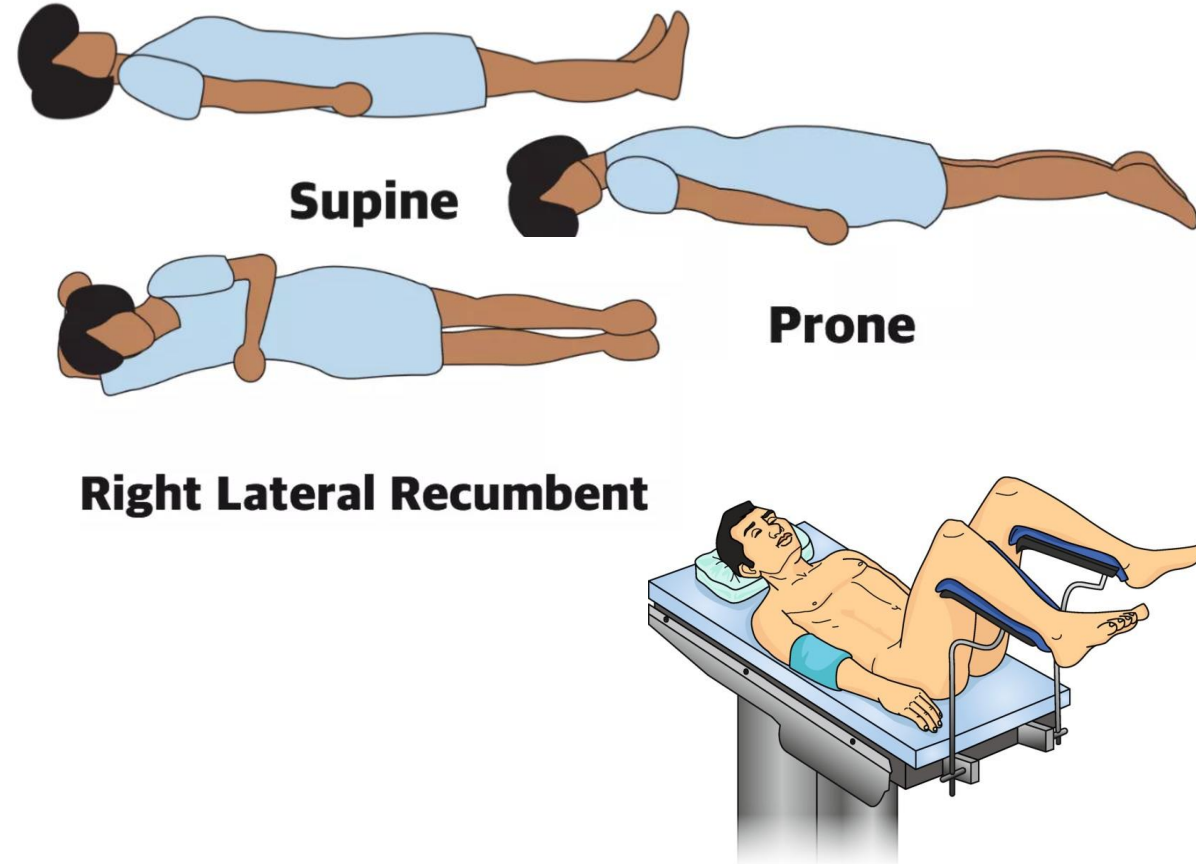
# Oblique planes

- Planes at an angle other than sagittal, frontal, or transverse.
- Useful for advanced imaging and sectional anatomy



## Anatomical Terms of Position – Test Stage

- **Supine Position** – Lying down on the back with the face directed upwards
- **Prone Position** – Lying down facing the ground
- **Lithotomy Position** – Lying down on the back with fully flexed (Knees pointing to the roof) and abducted (wide spread) thighs.
- **Lateral Decubitus** - The patient lies on their side (left or right), a position commonly used in medical imaging (like X-rays

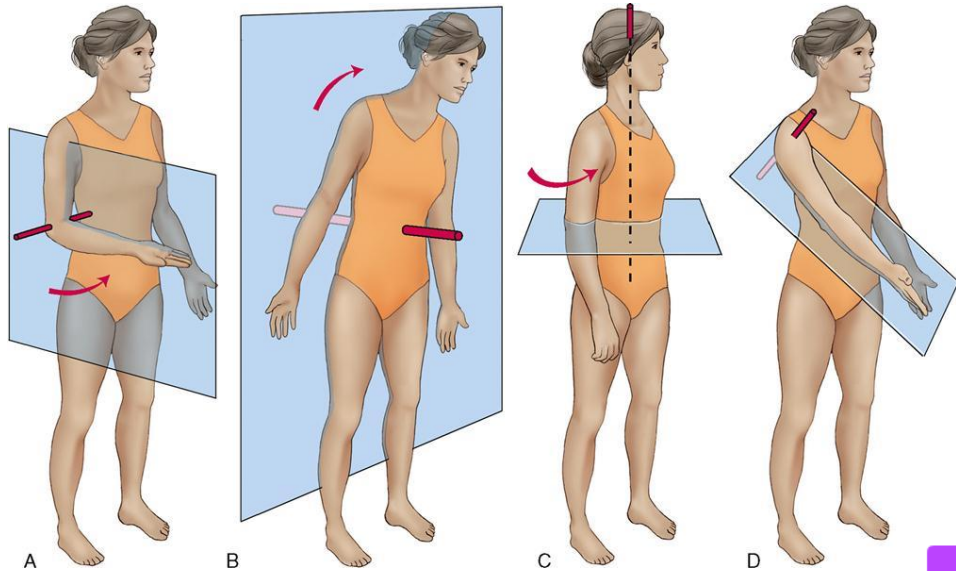


# Application in Clinical and Educational Settings - Test and Redefine



- Importance of planes and positions in surgeries, imaging (MRI, CT)
- Helps in planning and communicating complex procedures
- Use feedback to refine anatomical understanding and improve patient care

# Summary of Planes



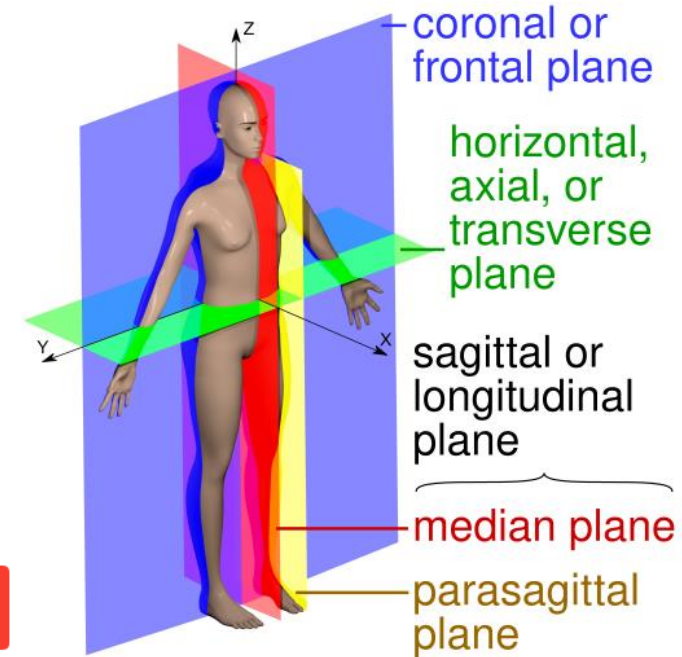
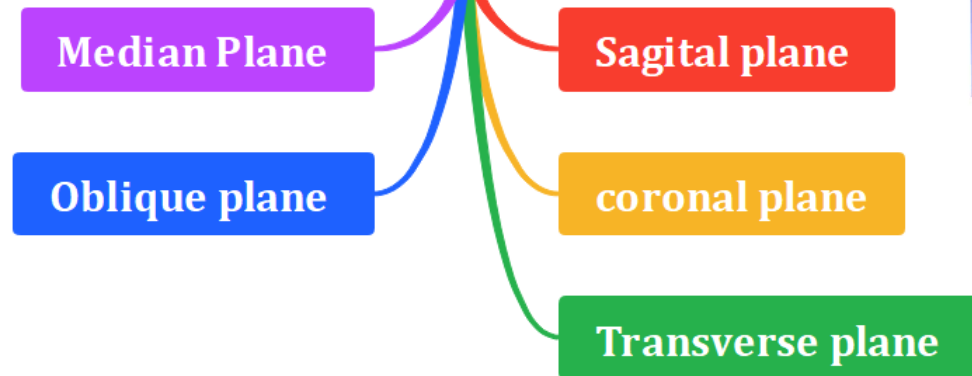
A - Sagittal Plane

B - Frontal / Coronal Plane

C - Transverse Plane

D – Oblique Plane

## Anatomical Planes



## References

- [https://bio.libretexts.org/Bookshelves/Human Biology/Human Anatomy Lab/01: Overview and the Microscope/1.02: Anatomical Position and Planes](https://bio.libretexts.org/Bookshelves/Human%20Biology/Human%20Anatomy%20Lab/01%3A%20Overview%20and%20the%20Microscope/1.02%3A%20Anatomical%20Position%20and%20Planes)
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- [https://www.physio-pedia.com/Cardinal Planes and Axes of Movement](https://www.physio-pedia.com/Cardinal_Planes_and_Axes_of_Movement)

**THANK YOU**