

# "Parathyroid Glands"

## » General Structure:

- Four ovoid bodies, approximately 6 mm in length.
- Located near the posterior border of the thyroid gland, within its fascial capsule.

## » Position:

### > Superior Parathyroid Glands:

- Consistent position at the middle of the posterior border of the thyroid.

### > Inferior Parathyroid Glands:

- Near the inferior poles of the thyroid.
  - May lie:
    - Within the fascial sheath or embedded in thyroid tissue.

- Outside the fascial sheath, near inferior thyroid veins.
- Occasionally, located in the superior mediastinum within the thorax.

## » Blood Supply

- Arteries: Supplied by the superior and inferior thyroid arteries.
- Venous Drainage: Drains into superior, middle, and inferior thyroid veins.

## » Lymph Drainage

- Drains to deep cervical and paratracheal lymph nodes.

## » Nerve Supply

- Supplied by superior or middle cervical sympathetic ganglia.

## » Functions of Parathyroid Glands

- Parathyroid Hormone (PTH) by Chief Cells:

- Bone:

- Stimulates osteoclasts, releasing calcium from bones, increasing blood calcium levels.

- Small Intestine:

- Enhances calcium absorption from diet.

- Kidneys:

- Increases calcium reabsorption in proximal convoluted tubules.
- Reduces phosphate reabsorption in proximal convoluted tubules.

- Regulation:

- Blood calcium levels control PTH secretion.