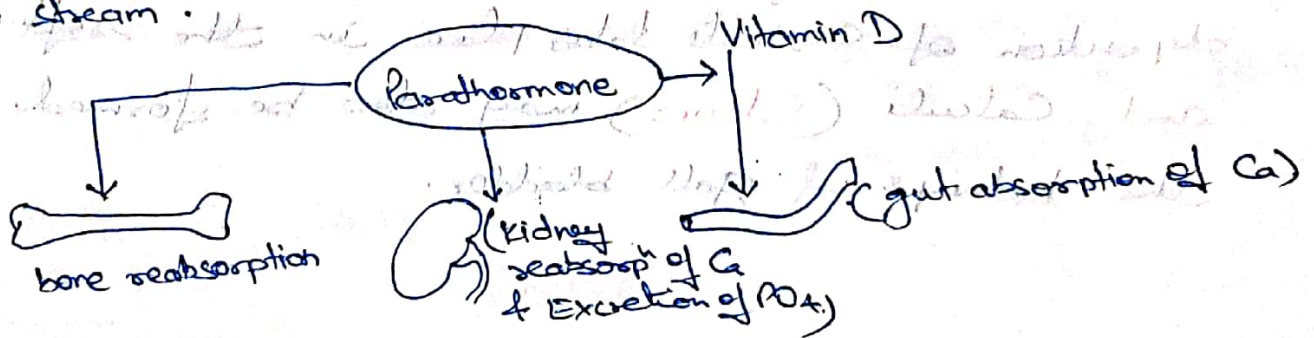


Hormones of Parathyroid

Two hormones are secreted - parathormone
Calcitonin

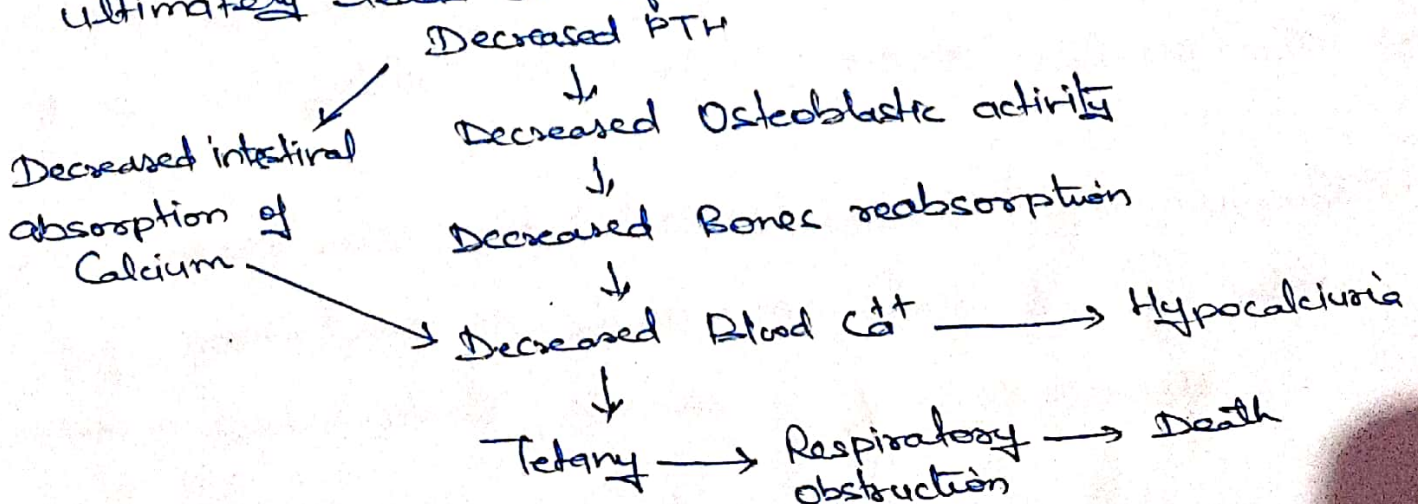
1) (PTH) Parathormone - Function:-

- * Regulates blood Calcium level, & phosphate level.
- * increase reabsorption of calcium by the kidneys, thus
↓ Ca^{++} excretion via urine.
- * ↑ intestinal absorption of Ca.
- * ↓ reabsorption of PO_4^{--} by kidneys.
- * ↑ Ca^{++} reabsorption from bone.
- * ↓ plasma PO_4 levels, as a result more Ca enters the blood stream.



Parathyroid Disorders:-

1. Hypoparathyroidism:- Due to deficiency of PTH, Hypocalcemia and hyperphosphatemia occurs, ultimately leads the follow. abnormalities:-



Tetany → Hypocalcemia leads to uncontrolled contraction of muscles, this condition is called Tetany.

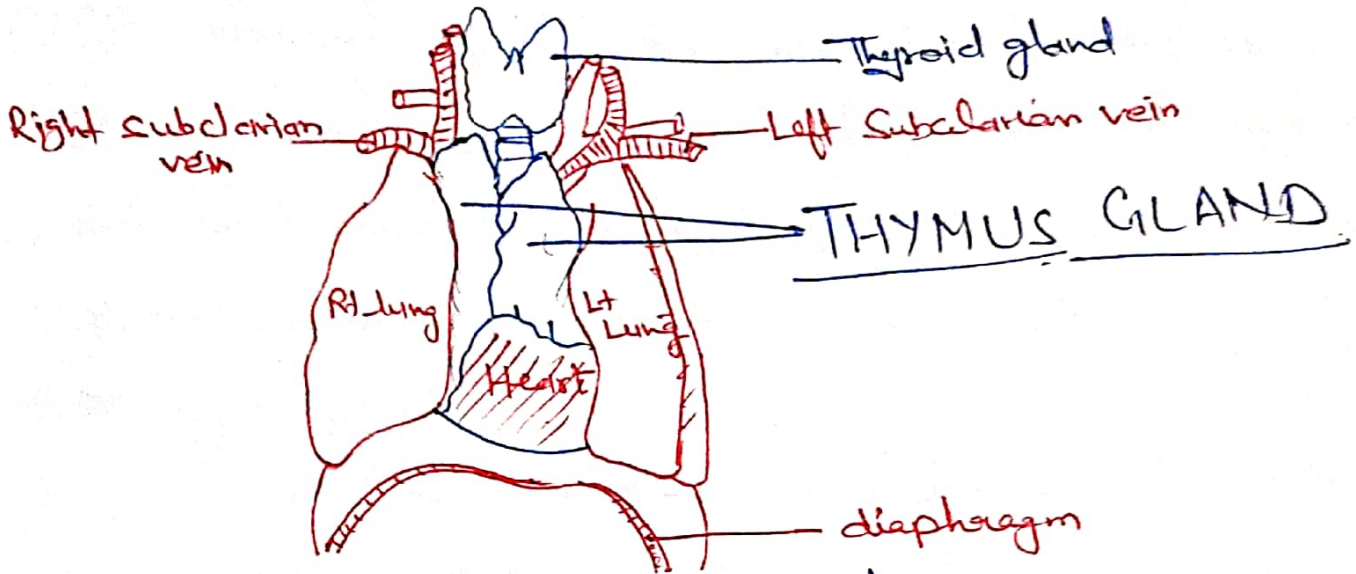
Hyperparathyroidism — Causes a syndrome like Osteitis fibrosa cystica or Von Recklinghausen's disease. This disease is characterised by —

i) Hypercalcaemia ii) Hypophosphatemia (iii) Raised serum activity of alkaline phosphatase.

Osteoporosis — Due to excess PTH, Ca & PO₄ salts from bones are released in the blood, due to excessive decalcification, bones become weak, elastic & deformed, these are prone to fracture.

* Because of high level of Ca in the serum, deposition of Ca salts takes place in the soft tissue and calculi (Stones) may also be formed in the kidneys & gall bladder.

THYMUS GLAND



Location of Thymus gland

Hormones - secrete 2 types of hormones, collectively called "Thymic Hormones".

① Thymosin

② Thymin / Thymopoietin

① Thymosin - secreted by reticulo-epithelial cells.

- it promotes the immuno-competence in young.
- T-lymphocytes cooperate with B-lymphocytes to defend the body against infections from microbes.
- produces lymphocytes during early life.

② Thymin - inhibit the release of acetylcholine at the endings of motor nerve in the disease called as myasthenia gravis.