



HYPERTHYROIDISM

DEFINITION

Hyperthyroidism is the condition that occurs due to excessive production of the thyroid hormones by the thyroid gland. Thyrotoxicosis is the condition occurs due to excessive thyroid hormones.

EPIDEMIOLOGY

It is common in those over the age of 60 years.

Women is most often affected than men.

United States affected with 1.2% of population.

ETIOLOGY

- Grave's Disease
- Over medication
- Thyroid hyperplasia
- It includes, Toxic multinodular Goitre
- Toxic adenoma
- Thyroiditis
- It includes, Hashimotos thyroiditis
- Hashitoxicosis
- Increased iodine uptake.

PATHOPHYSIOLOGY

TSH from the blood enters into the follicular cells of the thyroid gland activates TSH receptor cause release of thyroglobulin. Iodine which enters from the blood to cells of the thyroid gland. Hereby, thyroglobulin and iodine combines to produce thyroid hormones T3 and T4. From the thyroid hormones enters into the circulation.

Hyperthyroidism with Increase synthesis of thyroid hormones by increased iodine uptake

Grave's disease

Toxic adenoma

Iodine excess

In gestation by hcG

Pituitary adenoma

Hyperthyroidism with absent of thyroid hormones

Thyroiditis

Ingestion of THYROID hormones

DIAGNOSIS

Blood test

- THYROID stimulating hormone levels are low(TSH)
- Thyroxine T4 levels are high.

TREATMENT

Anti- thyroid drugs

- Carbimazole
- Methimazole
- Propylthiouracil
- Iodine
- Thiocyanate
- Perchlorate