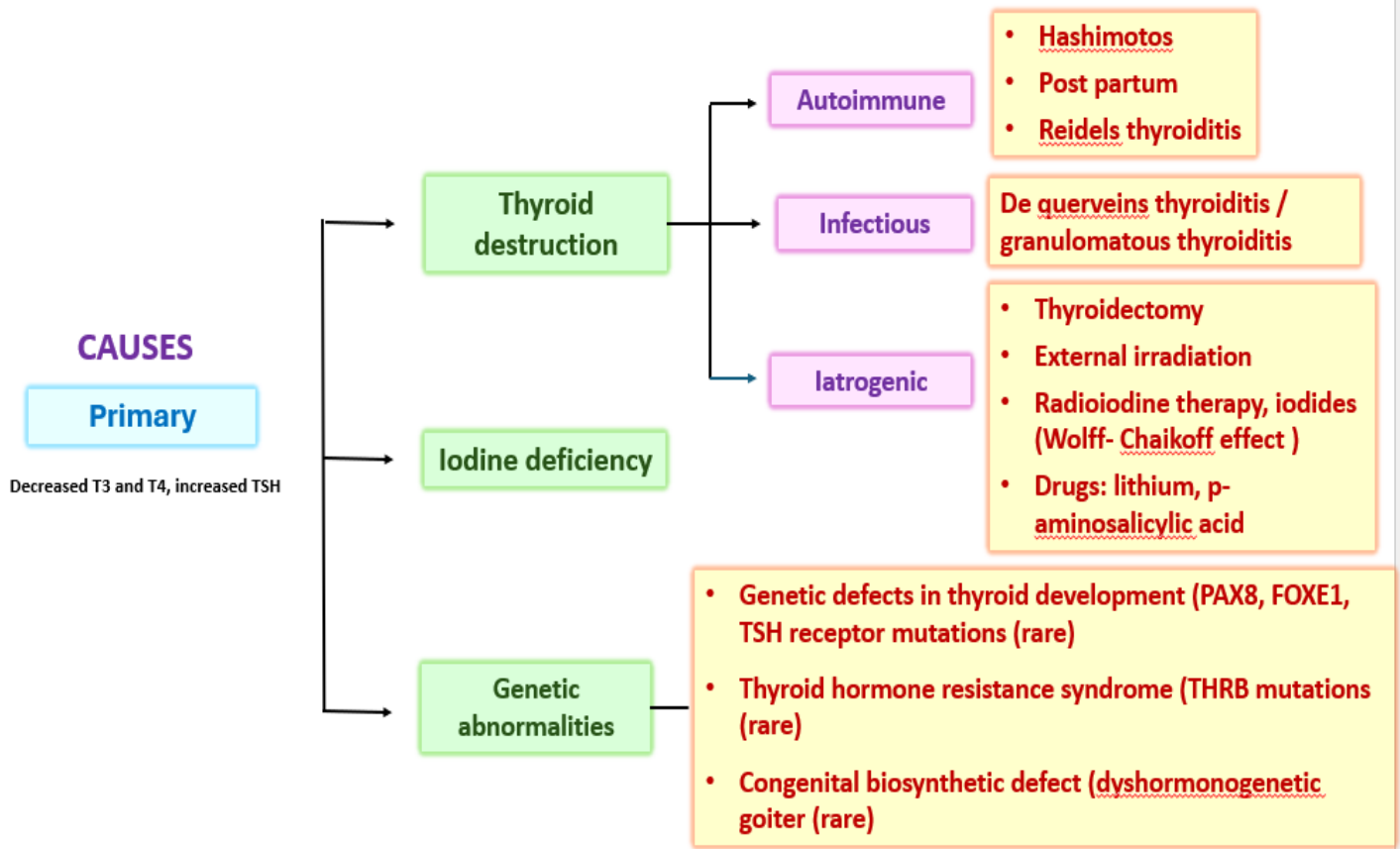
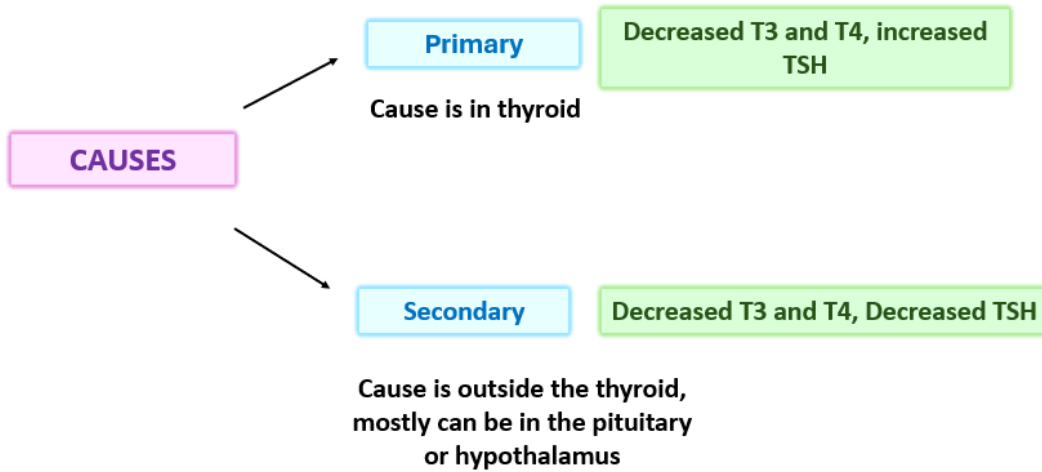
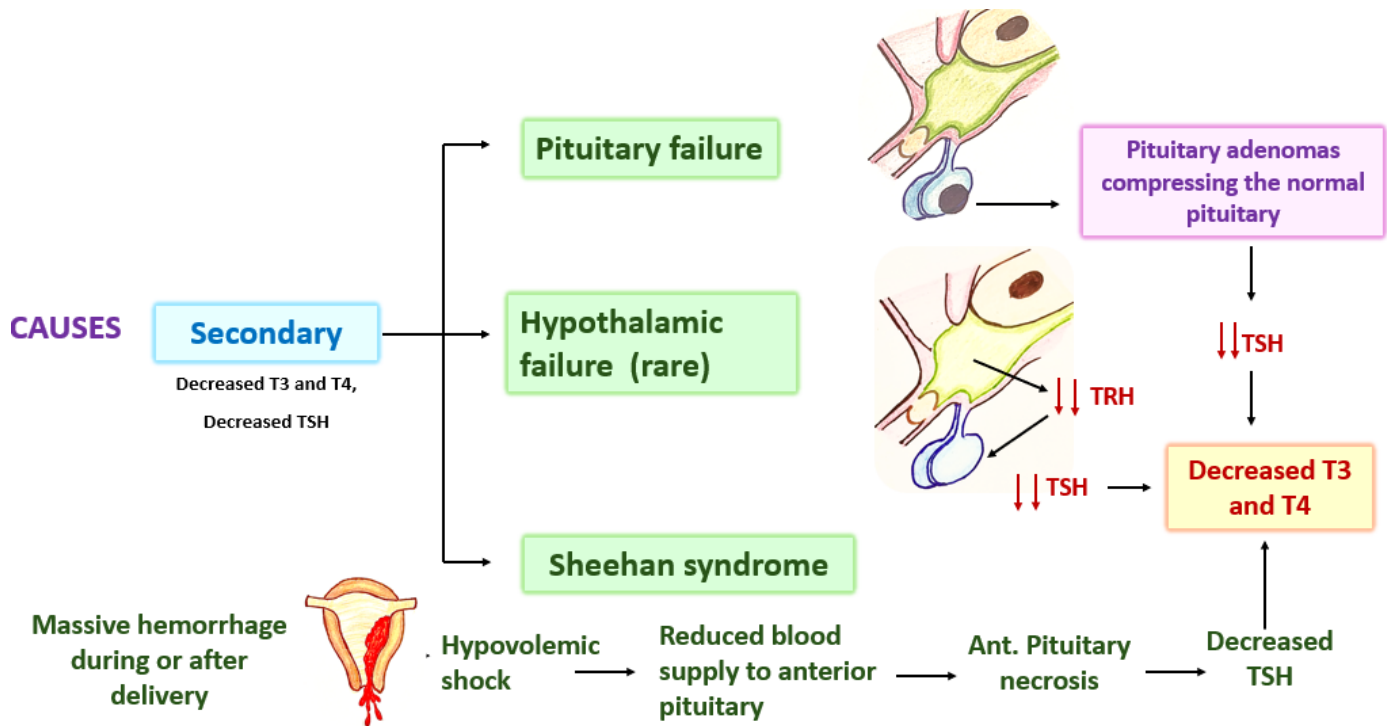


HASHIMOTOS THYROIDITIS

HYPOTHYROIDISM - Decreased T3 and T4 levels

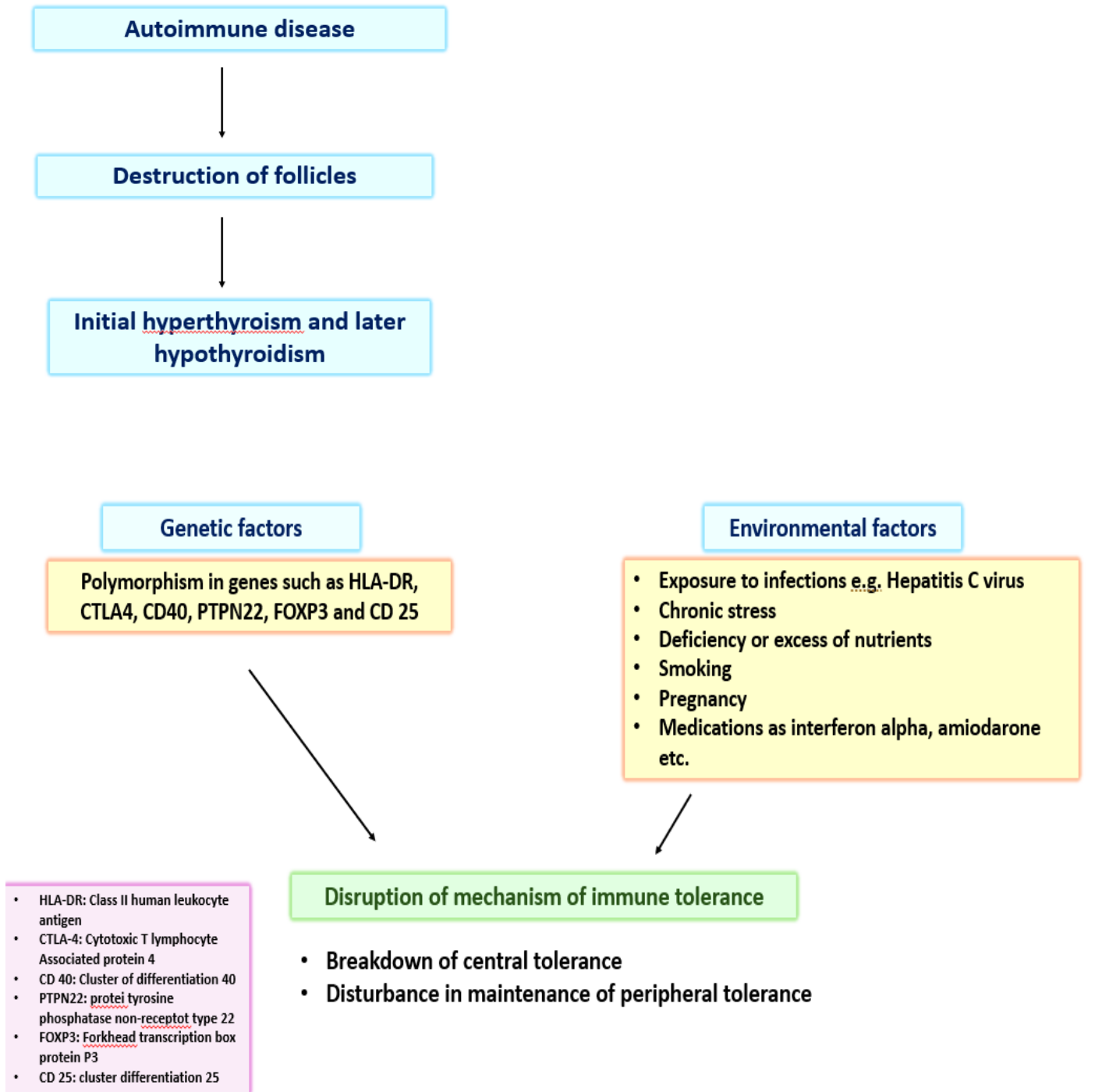


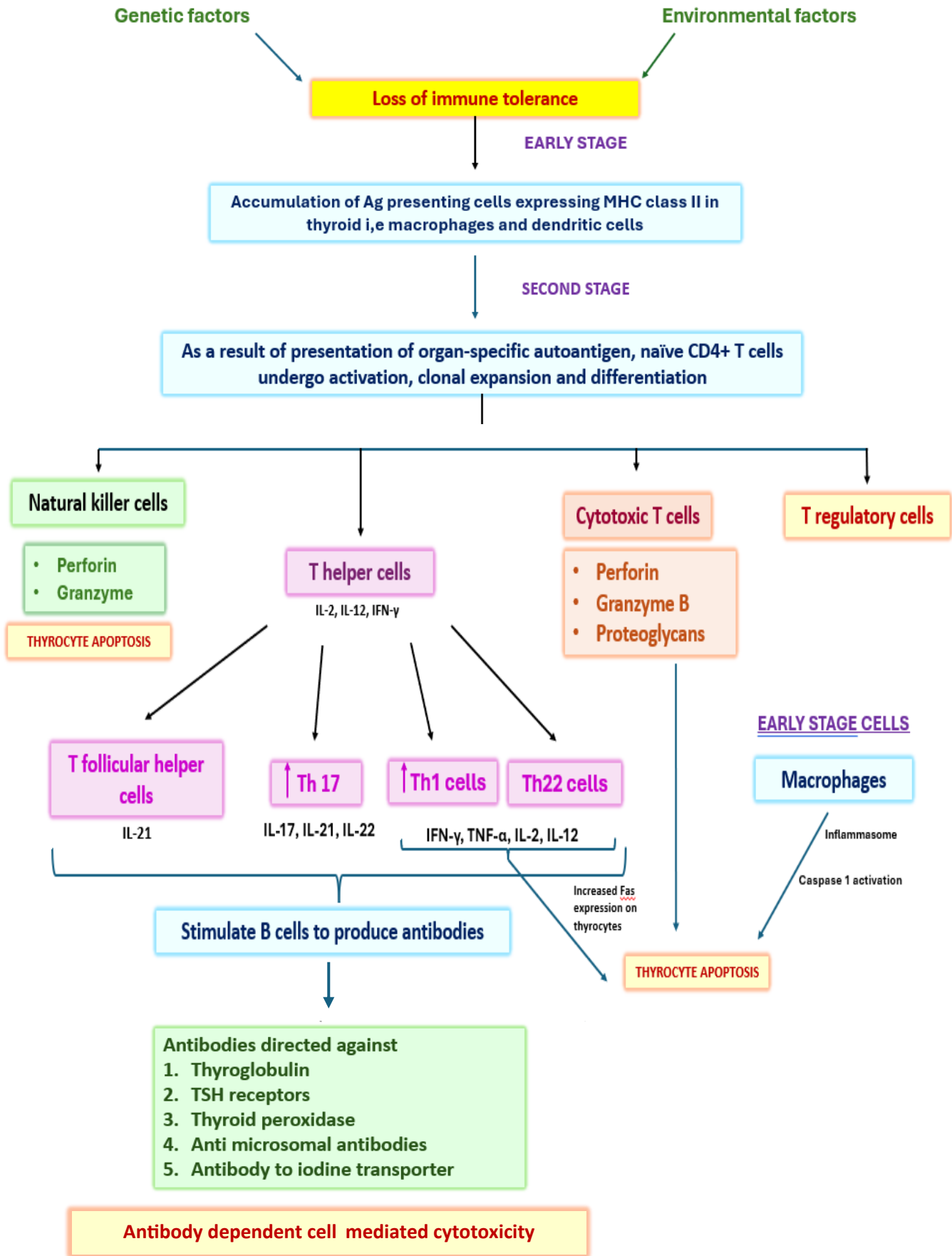


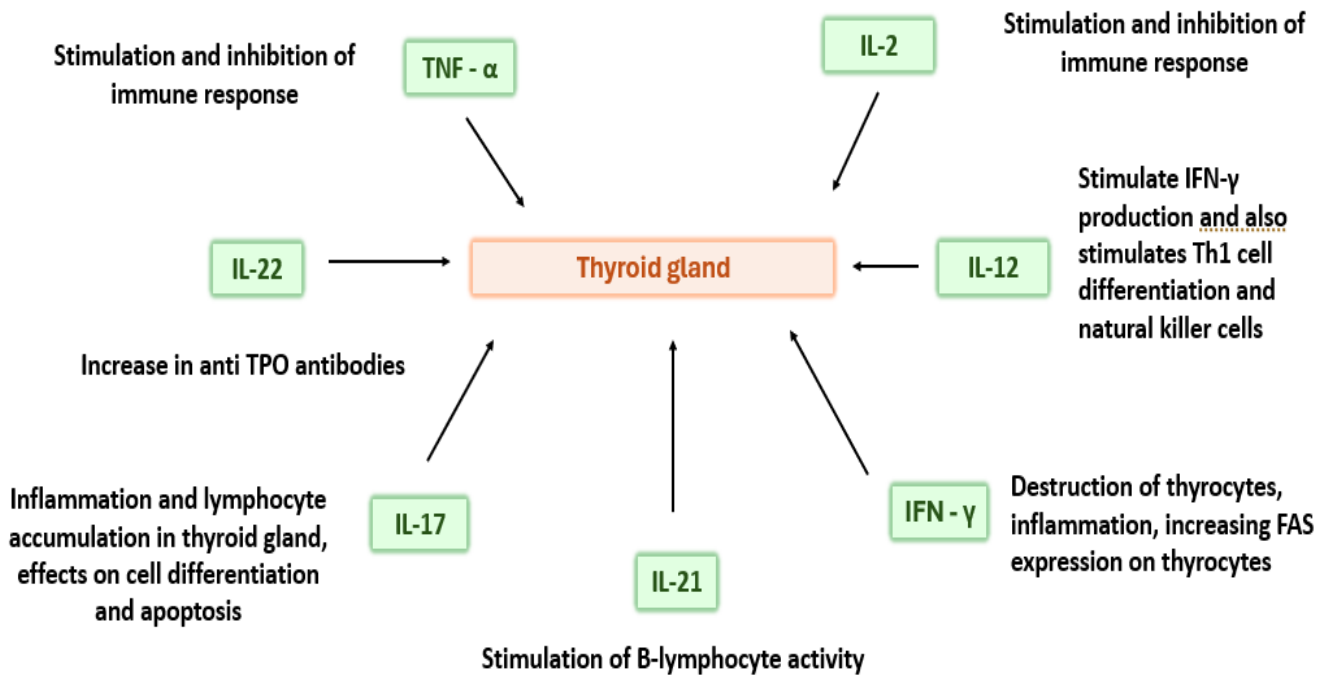
HASHIMOTO THYROIDITIS

- It is an **autoimmune disease** that results in destruction of the thyroid gland and gradual and progressive thyroid failure
- Common cause of hypothyroidism where iodine levels are sufficient
- Name is derived as it was first reported by Japanese physician Haraku Hashimoto in 1912 and he described it as struma lymphomatosa in which thyroid gland was enlarged and had lymphocytic infiltrate
- **Age** : prevalent in 45-65 years
- **Gender** : common in women than men (10: 1 to 20:1)
- Can occur in children as a major cause of non-endemic goitre

PATHOGENESIS:







Morphology

Gross -

- Size of thyroid gland is diffusely enlarged
- Cut section - pale, yellow-tan, to gray-white firm, and somewhat nodular

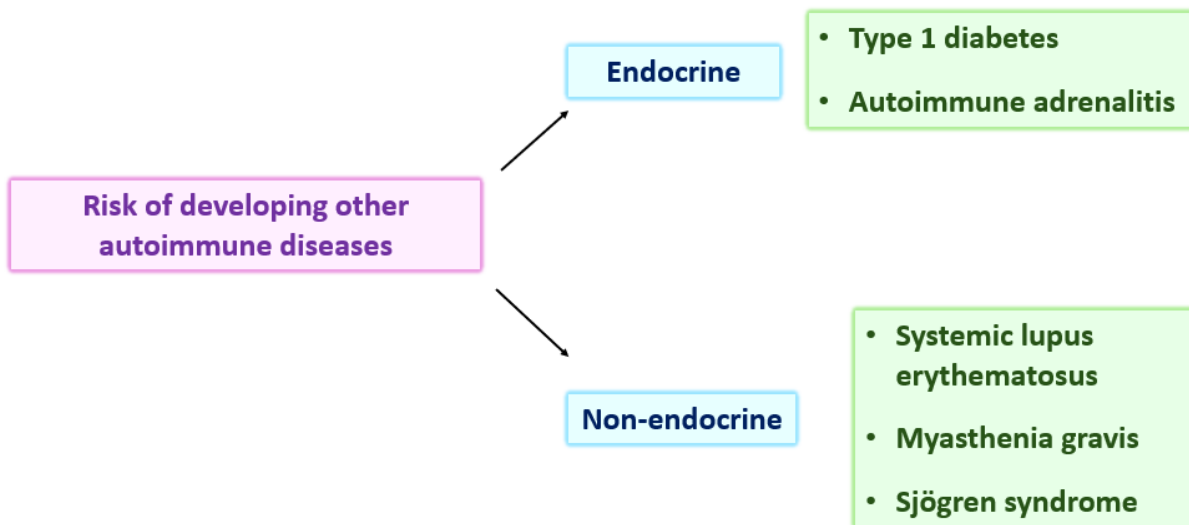
Microscopy –

- Extensive infiltration of the parenchyma by a mononuclear inflammatory infiltrate containing small lymphocytes, plasma cells, and well-developed germinal centers
- Thyroid follicles are atrophic and are lined in many areas by epithelial cells with abundant eosinophilic, granular cytoplasm, termed Hürthle cells, which represent a metaplastic response of the normally low cuboidal follicular epithelium to chronic injury
- In “classic” Hashimoto thyroiditis, interstitial connective tissue is increased and may be abundant

- Unlike Reidel thyroiditis, the fibrosis does not extend beyond the capsule of the gland

CLINICAL FEATURES

- Diffuse, symmetrical and Painless enlargement of thyroid gland associated with hypothyroidism
- Transient thyrotoxicosis caused by disruption of thyroid follicles and release of thyroid hormones (hashitoxicosis) – initial phase
- As hypothyroidism supervenes, T4 and T3 levels fall, accompanied by a compensatory increase in TSH- later stages



- They are also at **increased risk for development of malignancy**
 - Extranodal marginal zone B-cell lymphoma
 - Papillary carcinoma

SUB ACUTE LYMPHOCYTIC THYROIDITIS

- Also referred to as painless thyroiditis, is a presumed autoimmune disease
- Seen in **post partum period** (in upto 5% of women) within one year after parturition and patients have **antithyroid peroxidase antibodies**

Morphology

- **Gross** - mild symmetric enlargement of the thyroid
- **Microscopic examination** reveals lymphocytic infiltration with large germinal centers within the thyroid parenchyma and patchy disruption and collapse of thyroid follicles.
- **Unlike Hashimoto thyroiditis, however, fibrosis and Hürthle cell metaplasia are not prominent**
- Starts initially with hyperthyroidism and subsequently develops hypothyroidism (over 10 year period) and finally return to euthyroid state