

Graves' Disease	Hashimoto's Thyroiditis / Chronic Lymphocytic Thyroiditis
Hyperthyroidism	hypothyroidism
Associated with HLA class II	
Predisposing effect for DR3 & protective role: DR7	Predisposing effect for DR5 or DR4 & protective role: DR13
Anti-TSH receptor.	Antimicrosomal, antithyroglobulin
Autoantibody (IgG) that stimulates TSH receptor (type II hypersensitivity)	Delayed Type (IV) Hypersensitivity : intense lymphocyte infiltration.
1. Agitation. 2. sleep disturbance. 3. Sweating 4. palpitations. 5. Muscle weakness. 6. Weight loss despite increased appetite. 7. Diffuse Goiter . 8. Tremor. 9. Infiltrative ophthalmopathy (exophthalmos) . 9. pretibial myxedema . 10. proptosis 11. Lid lag	1. Fatigue. 2. Loss of energy 3. Cold intolerance. 4. Weight gain. 5. Mental slowing. 6. Enlarged thyroid. 7- goiter. 8. painless enlargement . Symptoms of hypothyroidism
Pathogenesis: Auto-antibodies bind the receptor for TSH > mimic the normal action of TSH > activating adenylate cyclase > resulting in production of the thyroid hormones > (hyperthyroidism)	Pathogenesis : Binding of the auto- antibodies to specific proteins > Interferes with iodine uptake and leads to > Decreased production of thyroid hormones > (hypothyroidism)
Histopathology: 1- Scalloped colloid appearance . 2- Epithelial cells turn to be columnar & hyperplastic . 3- Lymphocytosis.	Histopathology : 1- Extensive infiltration by lymphocytes and plasma cells. 2- Chronic inflammation with germinal centers and Hurthle cells (eosinophilic metaplasia of cells that line follicles).
Laboratory findings : 1. Increase total and free T4 , decrease TSH 2. Hypocholesterolemia 3. Increased serum glucose .	Laboratory findings : 1. T4 decrease 2. TSH increase 3. Antithyroglobulin and antimicrosomal antibodies are often present.
- Thyroid storm is a potentially fatal complication. - free T4 downregulates TRH receptors in the anterior pituitary to decrease TSH release)	- Increased risk for the development of B cell non-Hodgkin lymphomas and predisposition to papillary carcinomas . - With thyrotoxicosis in the early stages of the disease (damage to the thyroid follicles may lead to a transient rise in thyroid hormone levels)