

Graves' Disease Characteristics

Graves' disease is an autoimmune disease of the thyroid, which leads to hyperthyroidism. Classic findings include pretibial myxedema and exophthalmos. Patients display hyperthyroid symptoms (goiter, heat intolerance, weight loss, insomnia, hyperactivity, and palpitations) due to IgG antibodies which activate TSH receptors, leading to release of thyroid hormones.



PLAY PICMONIC

Women 20-40 years old

Women with 20-dollar-bill and 40oz

Graves' disease occurs 7 times more often in women than in men, and typically presents in women between the ages of 20-40.

Pathophysiology

Anti-TSH Receptor Antibodies

Anti-tissue Receptor Ant-tie-body

Graves Disease is an autoimmune Type II hypersensitivity reaction where anti-TSH receptor autoantibodies (IgG) stimulate TSH receptors on the thyroid gland. Often, these anti-TSH antibodies are formed during stress (e.g. childbirth).

Symptoms

Ophthalmopathy

Opal-wavy-eyes

This is one of the most typical features of Graves' disease, where inflammation occurs in the periorbital fat and extraorbital muscles. Other complications include lid-lag (Von Graefe's sign) and upper eyelid retraction

Exophthalmos

Extruding-eyes

Bulging or protrusion of the eyes (exophthalmos) occurs, giving patients with Graves' a characteristic look. Visible sclera in patients causes the appearance of a "stare."

Hyperthyroidism

Hiker-thigh-droid

Patients with Graves' disease often complain of hyperthyroid symptoms such as goiter, heat intolerance, weight loss, insomnia, hyperactivity, palpitations, diarrhea, and sweating.

Goiter

Goiter-goat

As there is autoimmune activity on the thyroid, diffuse thyromegaly takes place, forming what is called a goiter. Goiters are key for suspecting thyroid pathology.

Pretibial Myxedema

Praying-Tibetan Mixer-edamame

This is an infiltrative dermopathy, where a waxy, discolored induration of the skin occurs. Pretibial myxedema is highly associated with Graves' disease and occurs due to dermal fibroblasts.