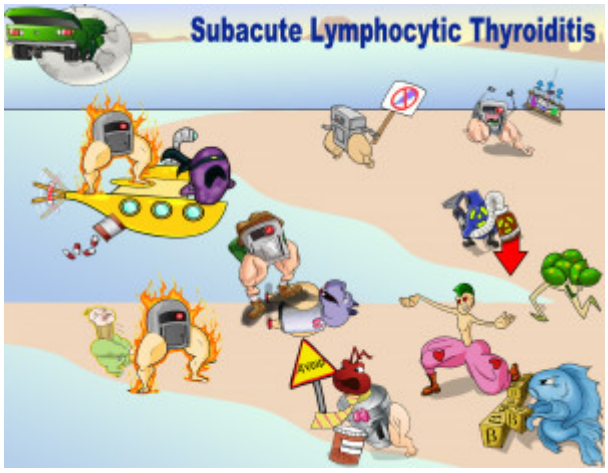
Subacute Lymphocytic Thyroiditis

Subacute Lymphocytic Thyroiditis is an inflammatory disease of the thyroid. It is most often caused by drugs, autoimmune disorders, and postpartum thyroiditis. Clinical features include early hyperthyroidism and late hypothyroidism. The thyroid is typically painless. Diagnosis is made through thyroid function tests (TFTs) that show increased T3/4 and decreased TSH, elevated ESR, decreased radioactive iodine update and lymphocytic infiltrate on histology. Treatment consists of beta blockers in the hyperthyroid phase followed by levothyroxine in the hypothyroid phase. Antithyroid drugs such as methimazole should be avoided.



PLAY PICMONIC

Etiology

Drugs

Med-bottle

Drugs such as alpha-interferon, lithium, amiodarone, interleukin-2, and tyrosine kinase inhibitors can contribute to the development of subacute lymphocytic thyroiditis.

Autoimmune Disorders

Auto-in-moon

Autoimmune conditions have been linked to an increased risk of recurrence and permanent hypothyroidism.

Postpartum Thyroiditis

Post-baby with Thigh-droid-on-fire

Subacute lymphocytic thyroiditis is associated with postpartum thyroiditis. This condition impacts ~5% of women and can manifest within one year following delivery. It is most common in those with T1DM and those with increased titers of thyroid peroxidase antibodies.

Clinical Features

Hyperthyroidism and Hypothyroidism

Hiker-thigh-droid and Hippo-thigh-droid

Subacute lymphocytic thyroiditis is similar to subacute granulomatous thyroiditis in that it presents with hyperthyroidism early in the course followed by euthyroidism. It can then transform into hypothyroidism.

Painless Thyroid

No Pain-bolts Sign with Thigh-droid

Subacute lymphocytic thyroiditis presents as a painless, diffuse, firm goiter. The thyroid can be of normal size. This is different than subacute granulomatous thyroiditis, which involves a painful thyroid.

Diagnosis

Thyroid Function Tests

Thigh-droid Functioning

Thyroid function tests (TFTs) should be performed to evaluate T3/T4 and TSH levels. In the thyrotoxic phase, there are elevated levels of T3 and T4 (even higher than in Grave's thyrotoxicosis) and thyroglobulin, with decreased levels of TSH. In the hypothyroid phase, patients present with decreased T3/T4 and increased TSH.

Elevated ESR

Up-arrow ESR-tubes

There is an elevated ESR in patients with subacute thyroiditis. ESR will return to normal by the end of the hypothyroid phase.

Decreased Radioactive Iodine Uptake (RAIU)

Down-arrow Radioactive-guy

There is decreased uptake (< 5%) of radioactive iodine in patients with subacute thyroiditis. This is due to follicular cell damage. Also, as TSH secretion is initially suppressed during the thyrotoxic phase, this impacts iodine uptake. Radioiodine uptake normalizes once TSH levels begin to rise during the hypothyroid phase.

Lymphocytic Infiltrate

Lymph-lime Infiltrating

Histological features of subacute lymphocytic thyroiditis include lymphocytic infiltration along with sparse germinal centers.

Treatment

Beta Blockers

Beta-fish with Blocks

In the thyrotoxic phase of subacute thyroiditis, beta-blockers can control the symptoms of hyperthyroidism (e.g. palpitations or anxiety).

Levothyroxine

Love-thigh-rocker

Levothyroxine can be administered during the hypothyroid phase of subacute thyroiditis.

Avoid Antithyroid Drugs

Avoid-sign Ant-tie-thigh-droid Med-bottle

Antithyroid drugs (e.g. methimazole) are contraindicated and should not be administered during the thyrotoxic phase of subacute thyroiditis. They can actually worsen the condition.