

Riedel Thyroiditis



PLAY PICMONIC

Pathophysiology

Autoimmune

Auto-in-moon

Riedel thyroiditis is a rare form of autoimmune thyroiditis that can be a part of a systemic fibrosing disorder or an immunoglobulin G4 (IgG4) related disease.

IgG4

(IgG) Gold-goblin (4) Fork

IgG4 is found to be related to Riedel thyroiditis. Its level can be seen as elevated in the patient's blood.

Fibrous Invasion of Thyroid

Fibrous-sacks Invading the Thigh-droid-city

Riedel thyroiditis is a rare chronic inflammatory disease that is characterized by invasive fibrosis of the thyroid gland.

Findings

Very Firm on Palpation

Paw Palpating Stone

During the physical examination, palpation may demonstrate a very firm or stony consistency. Riedel thyroiditis is also called iron-hard thyroiditis.

Nontender

No Pain-bolts-sign

Thyroid palpation on Riedel thyroiditis is non-tender, and a patient can experience painless thyroid enlargement.

Slowly Enlarging Mass

Snail with Enlarging Mass

Findings may include enlargement of the thyroid. It may develop slowly.

Invades Local Structures

Invading Local Structures

Fibrosis Riedel thyroiditis can extend to surroundings, which can cause airway compression. Patients may develop obstructive airway symptoms, such as hoarseness, dyspnea, and dysphagia.

Hypothyroidism

Hippo-thigh-droid

Hypothyroidism can be present in around 74% of patients with Riedel thyroiditis. It is defined as a high TSH level and low free T4.

Histology

Fibrous Tissue

[Tissue inside Fibrous-sacks](#)

Riedel thyroiditis is characterized by the replacement of normal thyroid parenchyma with fibrous tissues.

Eosinophilic Infiltrate

[Eosinophilic-eagles](#)

Riedel thyroiditis can be seen in histology findings as a dense hyalinized matrix with scanty colloid and abundance of the eosinophilic cell infiltrate with no malignant or giant cells.

Treatment**Prednisone**

[Prednisone-predator](#)

Prednisone is the most common therapy used to treat Riedel thyroiditis. It can reduce the mass size and the hardness of the thyroid.

Tamoxifen

[Tomahawks-fan](#)

Tamoxifen is a selective estrogen receptor modulator (SERM). It acts by inducing tumor growth factor-beta (TGF- β), a potent growth inhibitor, and helps in inhibiting the proliferation of fibroblasts. As a result, a reduction of Riedel thyroiditis's mass size occurs.

Surgery

[Surgeon-with-scalpel](#)

Surgery is indicated in situations when Riedel thyroiditis patients develop obstructive airway symptoms. It has a risk of causing hypoparathyroidism and a risk of recurrent laryngeal nerve damage.