We present a rare case of biopsy-proven pretibial myxedema in Graves' disease. We reviewed case notes, investigation results, imaging studies and discussed prevalence based on published reports.

CASE

A 39-year-old Chinese male presented with significant weight loss, neck swelling and bilateral lower limb nodular skin lesions. Clinical examination revealed diffuse goiter and bilateral anterior shin swelling. Thyroid imaging showed features consistent with thyroiditis, while bilateral anterior shin lesions indicated pretibial myxedema. Biochemical analysis revealed elevated thyroid function tests and positive thyroid-stimulating hormone antibody levels (>40 IU/L). A skin biopsy confirmed dermal mucinosis consistent with myxedema. Antithyroid medications were initiated. The patient expressed willingness to undergo radioactive iodine treatment if remission is not achieved.

CONCLUSION

Global reported cases of PTM are scarce. In China, a retrospective study revealed a prevalence of 1.6% within thyroid disorders, notably 1.7% in thyrotoxicosis and 0.36% in other thyroid conditions. In Malaysia, reported cases of PTM are minimal. PTM typically coexists with ophthalmopathy, mainly affecting the pretibial region. Pathologically, it results from glycosaminoglycan accumulation triggered by circulating thyrotropin-receptor antibodies, akin to thyroid ophthalmopathy.

In summary, PTM is a rare autoimmune manifestation of Graves' disease, commonly associated with ophthalmopathy and localized to the pretibial region. Clinical diagnosis is typically straightforward, often obviating the need for biopsy, particularly when Graves' disease is active.

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CARBIMAZOLE-INDUCED AGRANULOCYTOSIS WITH CONCURRENT SCRUB TYPHUS

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INTRODUCTION

While carbimazole is an effective treatment for hyperthyroidism, it carries a risk of agranulocytosis. Concurrently, rickettsial infections like scrub typhus can worsen neutropenia. We reviewed case notes, investigation results, imaging studies and treatment options based on a literature review.

CASE

A 55-year-old male farmer with hyperthyroidism on high-dose carbimazole treatment sustained a machete injury to his left middle finger. Upon presentation, he had fever, normal thyroid function, stable hemodynamics, severe neutropenia (total white count 0.4 × 10^9/L, absolute neutrophil count 0.02 × 103/μL) and typhus eschars. He was treated with doxycycline, piperacillin-tazobactam and subcutaneous granulocyte-colony stimulating factor (G-CSF). Abnormal thyroid function (FT4 46 pmol/L and TSH <0.01 m IU/L) and elevated C-reactive protein (234 mg/L) were also observed. Carbimazole was discontinued and replaced with oral cholestyramine and lithium. Positive serologic findings confirmed scrub typhus. With targeted treatment and G-CSF support, the patient's condition improved, as evidenced by normalized blood counts. Radioactive iodine therapy was contemplated once thyroid function was controlled.

CONCLUSION

Carbimazole carries the risk of severe adverse effects, including agranulocytosis. This risk may be compounded with a concurrent rickettsial infection, which can also cause neutropenia. Diagnosis relies on clinical suspicion and profound neutropenia, requiring thorough evaluation including serological tests and PCR to differentiate between agranulocytosis-related and rickettsial infections. Immediate discontinuation of carbimazole and replacement with alternative antithyroid drugs is necessary, often supplemented with broad-spectrum antibiotics and G-CSF to prevent overwhelming infection risks. Tailored antibiotic therapy should also be administered for the rickettsial infection. Prompt recognition and intervention are crucial, particularly in endemic areas. Early diagnosis and aggressive management can help mitigate morbidity and mortality. Educating patients on symptom recognition remains the most effective preventive measure.

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"SWINGING HEART" IN A SEVERELY HYPOTHYROID PATIENT: A CASE REPORT

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INTRODUCTION

Hypothyroidism is a disorder with multiorgan involvement that may lead to various complications. Pericardial effusion is commonly seen in cases of severe hypothyroidism, which may deteriorate into life-threatening cardiac tamponade. Early diagnosis and management of pericardial effusion in hypothyroidism is crucial.