

as 6 months for the highest risk and before 5 years old for other high-risk codon mutations is crucial in reducing the risk of micro-metastases.

# EP\_A157

## SIGHT-THREATENING ACTIVE GRAVES' OPHTHALMOPATHY WITH NEWLY DIAGNOSED HEPATITIS B

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### INTRODUCTION/BACKGROUND

Graves' Ophthalmopathy (GO) is an orbital autoimmune disease that is the most frequent extrathyroidal expression of Graves' disease. Full-blown disease is associated with disfiguring features (exophthalmos, stare), inflammatory signs and symptoms, ocular dysfunction (diplopia), and rarely, visual loss due to compressive Dysthyroid Optic Neuropathy (DON). The prevalence of GO in Malaysia was 34.7%.

### CASE

A 66-year-old Orang Asli female, active smoker with underlying type 2 diabetes, hypertension and dyslipidaemia presented to us in March 2024 with complaints of eyesore and redness for 3 months. In addition, she had photophobia, insomnia, and intermittent headache for 1 month. She had exophthalmos and DON with a clinical activity score (CAS) of 6. Her thyroid stimulating hormone (TSH) level was 40 IU/L. She was started on oral carbimazole 30 mg once a day. In view of sight-threatening DON, she was commenced on high-dose intravenous methylprednisolone 1 gm daily for 3 days, subsequent tapering dose of 500 mg weekly for 6 weeks, and then 250 mg weekly for another 6 weeks. However, her Hepatitis B surface antigen (HBsAg) was reactive and she had mild transaminitis which were relative contraindications for corticosteroid pulse therapy. She was co-managed with the Gastroenterology team and started on oral tenofovir 300 mg once daily. Post IV methylprednisolone, her eye signs and vision had clinical improvement. Her liver function tests remained stable.

## CONCLUSION

This case highlights the challenges in managing severe sightthreatening active Graves' ophthalmopathy in a patient with newly diagnosed hepatitis B. Prompt treatment is crucial to prevent further deterioration of her eye condition.

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## A LETHAL CASE OF SEVERE CARBIMAZOLE-INDUCED AGRANULOCYTOSIS

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### INTRODUCTION/BACKGROUND

Agranulocytosis is a severe complication of carbimazole, the primary drug for treating hyperthyroidism. It is rare with an incidence rate of 0.3–0.6% and mortality rate of 21.5%. Onset may develop within 7 days of initiation of anti-thyroid drug therapy. This case report highlights the deleterious effect of carbimazole-induced agranulocytosis in an elderly female.

#### CASE

A 70-year-old female with newly diagnosed hyperthyroidism (baseline TSH: 0.002 m IU/L, free T4: 58 pmol/L) was initiated on carbimazole 30 mg once daily at a health clinic. After approximately one month on carbimazole, she developed fever, sore throat, and multiple oral ulcers. On examination, she exhibited a spiking temperature of 39.4°C, injected throat, multiple oral ulcers over the hard palate, tongue, and lower lip, and a diffuse goitre. She had leucopoenia with total white blood cell count of 1.0, with immeasurable absolute neutrophil count (ANC) and no blast cells. Repeat TSH was 0.003 m IU/L and fT4 was 39.55 pmol/L. Chest radiograph showed consolidation over the right lower lung zone. Initial treatment included intravenous piperacillintazobactam, subcutaneous granulocyte colony-stimulating factor (G-CSF) 300 mcg daily, cholestyramine, Lugol's iodine, and propranolol. Due to the deterioration in her clinical condition, we promptly escalated her antimicrobials to meropenem, micafungin and increased her G-CSF dosing to 300 mcg two times a day. Her ANC remained at 0.01-0.02 (10<sup>9</sup>/L). Despite treatment escalation, she succumbed to severe sepsis after 8 days of admission.

### CONCLUSION

The primary treatment for carbimazole-induced agranulocytosis involves discontinuing the offending drug and administering intravenous broad-spectrum antibiotics. G-CSF may be used to expedite haematological recovery. Clinical vigilance is crucial when initiating carbimazole, especially in high-risk patients such as the elderly and those receiving high doses initially, by conducting early repeat blood investigations. This approach enables early intervention to mitigate adverse outcomes and ensure a favourable prognosis.