## Tozinameran

## Graves' ophthalmopathy (GO) worsening: 2 case reports

In a case report, 2 patients (1 woman and 1 man) aged 58 years and 43 years were described, who developed Graves' ophthalmopathy (GO) worsening following vaccination with tozinameran [routes, dosages and outcomes not stated].

A 58-year-old woman had a significant medical history of GO and Graves' disease (GD). She presented with a Clinical Activity Score (CAS) 6/10, diplopia, foreign object sensation and pain in eyes, chemosis, periorbital oedema and redness of conjunctiva and eyelids, indicative of GO worsening, after 3 days of vaccination with the second dose of tozinameran [Pfizer-BioNTech; BNT162B2 SARS-CoV-2 vaccine]. Laboratory investigations revealed euthyroidism under levothyroxine sodium [levothyroxine] and positivity for thyrotropin receptor antibodies (TRAb). Prior to 2 years of her current presentation, she had received iodine radioactive [radioactive iodine] and methylprednisolone [metilprednisolone] for GD and GO, respectively, which had led to a stable condition until vaccination. GO worsening treatment was planned with teprotumumab. Based on the presentation, it was noted that she developed GO worsening secondary to tozinameran.

A 43-year-old man presented with the worsening of moderate-to-severe and active GO, developed after 2 weeks of vaccination with tozinameran [Pfizer-BioNTech; BNT162B2 SARS-COV-2 vaccine]. He exhibited a high-risk of eyeball subluxation, dysthyroid optic neuropathy (DON), bilateral exposure keratopathy due to lagophthalmos and diplopia with abduction deficit. Investigations showed elevated TRAb levels. One year prior to his current presentation, he was diagnosed with GD under thiamazole [methimazole] and GO. At the time, he had received methylprednisolone and external orbital radiation, leading to subjective amelioration. Based on the presentation, it was noted that he developed GO worsening secondary to tozinameran.

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