Temporary bilateral central scotoma under scotopic conditions associated with oral Semaglutide

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<u>Introduction</u>: To report a case of a bilateral central scotoma present under scotopic conditions with a positive afterimage associated with the short-term use of Semaglutide in a male ophthalmologist that resolved with medication discontinuation.

Case Presentation: A 72-year-old male ophthalmologist, with an ocular history of macular drusen and cataract surgery in the right eye, noticed a constant, unchanging scotoma in his right eye and subsequently his left eye 20 days after starting 3.0mg Semaglutide once daily. The right eye scotoma was only present in a dimly lit room and would persist until he was in a photopic condition. Upon closing the eyes, the scotoma would be followed by a bright white positive afterimage that would fade within 6 seconds. After a few days, the scotoma of the right eye changed shape, and the day after he experienced a scotoma of his left eye. Medication was stopped after the left eye developed symptoms. After discontinuation, the scotomas subsided within 3 days. An ocular exam with macular and retinal nerve fiber layer OCT and HVF 10-2 testing revealed no remarkable findings except for scattered drusen on OCT with no diabetic retinopathy. Either any findings resolved prior to evaluation, or the pathophysiologic process could not be identified with testing.

<u>Discussion</u>: Semaglutide is approved for weight loss and diabetic treatment; however, there is more to learn about its potential visual side effects. One potential association is the development of a central, bilateral scotoma present under scotopic conditions that can resolve after medication discontinuation.