

Charles-Bonnet Syndrome after intravitreal injection of Brolucizumab: A case report

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Introduction

In this work we describe a case of Charles-Bonnet Syndrome, a condition defined as the perception of complex visual hallucinations in patients with some sort of visual deficit, with the awareness of the unreal nature of this phenomenon, with the absence of hallucinations in other sensory modalities and with the absence of any other neurocognitive impairment. It is about a rare syndrome, whose association with intravitreal injections of Brolucizumab has been rarely reported in literature so far.



Representative images of the patient's visual hallucinations, created by artificial intelligence

Case report

Patient T.M.M., male, 73 years old, Ph.D in cognitive psychology and psychology professor for 38 years, no history of personal or family psychiatric illness, has been treating Age-Related Macular Degeneration for 8 years. For 5 years he was subjected to various intravitreal injections, of Ranibizumab and Aflibercept, and didn't present any type of hallucination. About 6 months ago, after starting the treatment with Brolucizumab, the visual hallucinations began to show. He refers to them being more common right after waking up. He describes the hallucinations as images of humans and animals. They last for a few seconds, paralyzed or in motion. Some examples would be the image of a woman rocking a baby, a child getting up and down next to the bed or a huge mouse standing on the mattress. The patient says he's fascinated by the visions and reports, being totally aware that they are not real. The images presented in this work were created by artificial intelligence by the patient himself.

Discussion

Charles-Bonnet Syndrome has been associated with ophthalmological affections like Age-Related Macular Degeneration, glaucoma and cataract, besides other conditions like temporal arteritis, pituitary tumors and even the use of brimonidine eye drops. However, reports of its association to intravitreal injections, specifically with Brolucizumab, are still uncommon. Despite its rarity, it's very important to know to recognize the syndrome, because the clarification about it brings relief to the patient and family, reducing anxiety and worries related to the possibility of mental illnesses.

References

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