Case Report

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Diagnosis and Management of a Case of Charles Bonnet Syndrome

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Abstract

Charles Bonnet syndrome is among one of the clinical conditions which are not very commonly encountered. Visual hallucinations generally found along with it are complex but interesting. Elderly persons with visual impairment are more prone to develop this syndrome. But pieces of literature have shown that impairment of visual function might not be always accompanying with it. Here we are reporting a case of Charles Bonnet syndrome that had no gross visual abnormality.

Keywords: Charles Bonnet Syndrome; Hallucination; Occipital Cortex; Olanzapine.

Introduction

Charles bonnet syndrome is a clinical condition of having complex visual hallucination in a non-psychotic person, generally due to a defect in the visual pathway [1,3]. These hallucinations are also termed as visual release hallucinations [1,2].This syndrome was first described by Charles Bonnet in 1760 in grandfather who was suffering from cataract. Later on, in 1967 George de Morsier, labeled the condition as Charles Bonnet syndrome [3]. Dysfunction of the visual pathway starting from the retina to visual cortex is the sole pathophysiology behind it [1,3]. Studies have reported that 10- 40% of the older population (more than 65 years) are found to be having Charles bonnet syndrome [3]. Teunisse et al have proposed some diagnostic criteria for this syndrome. Which are as follows [4].

a. At least one complex visual hallucination within the past 4 weeks
b. A period between the first and the last hallucination exceeding 4 weeks
c. Full or partial retention of insight into the unreal nature of the hallucinations
d. The absence of hallucinations in other sensory modalities
d. Absence of delusions

Here we are reporting a case of Charles bonnet syndrome who had mild visual impairment on ophthalmological examination.

Case History

A 75 years old man presented to our Out Patient Department with a chief complaint of seeing unusual things which are not seen by others for the last 3 months. On detailed enquiry, he revealed that he would see snakes crawling on his bed, especially during evening hours. Out of fearfulness, he would call his family members to rescue him. Aside from that, he used to see a doctor was about to perform an operation but suddenly he got disappeared.

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Following that our patient repeatedly would search for the doctor, even he used to call his family member to search for the doctor. After repeated assurance from the family members, his unusual behaviour was persisting. He was seeing these unusual events continuously for the last 3 months. Apart from this, our patient was not having any other features of psychosis. His past history of physical and mental illness did not uncover any abnormality. There was no history of taking any medications and psychoactive substances. Premorbidly he was well adjusted in nature. On mental status examination, he was co operative, alert, anxious, visual hallucination which was of the complex in nature, persisting, independent of his will and mood congruent. His cognitive function, judgment, and insight were intact. Subsequently, an ophthalmological examination was sought which had revealed no major abnormality except decreased visual acuity, which can be explained by his age-related changes. Looking at the nature of the hallucination and absence of any other psychotic feature and absence of any ophthalmological abnormality. He was started on a low dose of antipsychotic (Olanzapine 5 mg). On subsequent visits, he was found to be better.

Discussion

Charles bonnet syndrome is often found in elderly people with visual impairment [5,6,7]. Macular degeneration of retina has been reported frequently to be associated with it [1,5,6,7]. Hallucinations are generally visual in nature [1]. Involvement of other senses is generally not seen. Exact etiology of Charles bonnet syndrome is not known, although defect in visual pathway starting from lens to the occipital cortex are generally seen to be associated with it [1-5,7]. Ohare et al had described development of complex visual hallucination in a patient with Retinitis Pigmentosa [5]. Makino also had described Charles bonnet syndrome in a 88 year old women, who was also harboring Retinitis Pigmentosa [6]. Gorgens et al reported an 80 years old lady with Charles bonnet syndrome who was suffering from degeneration of macular region of the retina [7]. Neurophysiology behind this syndrome has not been clearly explained. But. Burke has stated that damage to the visual pathway cause deafferentation, leading to disinhibition and spontaneous firing of the visual cortex [8]. Our patient also had visual hallucination which was persisting and complex in nature. But on ophthalmological assessment, he was not found to be having any abnormality of the visual tract. He only had decreased visual acuity which can be explained enough by his age-related changes. Bhatia et al also had a similar finding like our case in which they described complex visual hallucination in a person with no major abnormality of the visual tract [1]. The motivation behind highlighting our case is the variety of the presentation of this syndrome. Although a lot of literature are supporting the association of major visual anomaly, it might be developed in person with normal or minor visual problems.

Conflicts of Interest

NIL

Financial Disclosures

NIL

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