Atypical Charles Bonnet Syndrome

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ABSTRACT

Charles Bonnet syndrome (CBS) is not uncommon disorder. It may not present with all typical symptoms and intact insight. Here, a case of atypical CBS is reported where antipsychotics were not effective. Patient improved completely after restoration of vision.

Key words: Charles bonnet syndrome, psychosis, visual hallucinations

INTRODUCTION

Charles Bonnet syndrome (CBS) was first described by Charles bonnet in 1769 in his 89 years old grandfather who started experiencing visual hallucinations of men, women, carriages and building after vision loss due to cataract and who was aware about the false nature of his perceptions. He himself developed the same condition after visual loss in his later life. The term CBS was coined by de Morsier in 1938. It is characterized by vivid and complex visual hallucinations in a patient suffering from vision loss in the absence of any other psychiatric illness and the patient is usually aware that these perceptions are not real. Gold and Rabins suggested the term may be useful when used in the strict sense of complex visual experiences with insight.[1]

Here, we are reporting an atypical case of CBS of a 72 years lady who presented with visual hallucinations, auditory hallucination with absent insight after she had vision loss. Her vision loss was due to diabetic retinopathy, ocular hemorrhage and cataract and her psychotic symptoms that were not responding to adequate antipsychotic medication resolved completely after bilateral cataract surgery.

CASE REPORT

A 72-years-old female was brought to psychiatry outpatient department, relatives reported that for last 1 month, she is complaining, she is not in her home as she often says that she should be taken to her own home. She was not able to move about freely due to her impaired vision, weight and diabetic neuropathy. She had to be helped for activities of daily living due to impaired vision. She would often say that there are people around her whom she does not know. She was also hearing voices of some persons crying and would ask her daughter-in-law about it. She said she could see a few children eating from her plate when she is eating her meals and she would ask them to be removed. She said there are 3-4 children of 6-8 years age who are eating from her plate. She could see monkeys in her room. At times she would say that she is being taken in an ox-cart, she could see the desert and ruins of a building. She would repeatedly say that she can see many persons around her and they should be removed from there, or she should be taken to her own home. She remained irritable due to the presence of visual and auditory hallucinations.

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of unwanted persons around her. At times, she also said that someone has carried out black magic on her, though on examination, it was not a firmly held belief. On mental status examination her cognitive functions were intact. She had auditory and visual hallucinations. She was troubled by auditory and visual hallucinations and lacked insight.

She was a diagnosed case of diabetes and hypertension since 1999. She also had diabetic nephropathy and neuropathy. She was on injection Insulin twice a day 18 units and 12 units, morning and evening.

In March 2009, she had an ophthalmic examination. She had proliferative diabetic retinopathy and ocular hemorrhage. She had complete vision loss since March 2009 (2 months) and had to be helped for activities of daily living. She was taking tablet alprazolam occasionally for last 1 year. Her appetite was normal, but sleep was disturbed.

She was started on Tablet Aripiprazole 10 mg/day, later increased to 15 mg/day. However, there was no improvement after 2 months and in June 2009, tablet Risperidone was started initially 2 mg/day, increased to 4 mg/day. She was also given tablet lorazepam 2 mg/day. There was no improvement in any of her symptoms. A computed tomography scan was suggested but due to her difficulty in walking and obesity, relatives expressed inability to get it done.

In June 2010, she had her ophthalmic checkup. She had mature cataract in both eye, it was not possible to examine her retina. A decision was made to perform cataract surgery in both eyes simultaneously, as it was difficult to bring her to hospital repeatedly. After cataract surgery her psychotic symptoms resolved completely within 1 week. Her risperidone was stopped; she remained symptom free until her death in September 2011.

**DISCUSSION**

For CBS the following diagnostic criteria are accepted by most authorities: (1) The presence of formed, complex, persistent or repetitive, stereotyped visual hallucinations. (2) Full or partial retention of insight into the unreal nature of the hallucinations. (3) Absence of hallucinations in other sensory modalities. (4) Absence of primary or secondary delusions.

CBS can be easily confused with such psychiatric conditions as delirium, dementia, and psychosis, which are common in elderly patients and these conditions must be ruled out beforehand as they carry a different prognostic significance.

It has been claimed that cases of true CBS (i.e., complex visual hallucinations in the absence of neuropsychiatric disorder and with full insight) are exceedingly rare and most cases described in the literature are CBS plus, i.e., visual hallucinations in the presence of a neuropsychiatric disorder or with the sufferer totally lacking insight that the hallucinations are unreal. Hallucinations in CBS are usually associated with bilateral vision loss due to macular degeneration, glaucoma, and cataract. Few case reports also described visual hallucinations in patients suffering from subarachnoid hemorrhage, pituitary adenoma, occipital lobe epilepsy, herpes simplex encephalitis.

Its prevalence in patients suffering from vision loss ranges from 15% to 57% in different studies. It is said that one in seven old age person will experience visual hallucinations.

The exact etiology of CBS is unknown. It has been postulated that visual hallucinations in a person can be the result of secretary phenomenon. The visual cortex had complex connections and it was believed that visual hallucinations result from increased neuronal activity or from a complex interaction related to the disappearance of the cortical inhibition. It was found that hallucinations in CBS correlate with cerebral activity in the ventral extra striate visual cortex.

Although, hallucination can disappear with or without treatment and reassurance about relationship of these hallucinations with vision loss is all that is required in few cases, yet drugs are also tried in most of the cases and carbamazepine, gabapentin, cisapride, olanzapine, risperidone, ondansetron, and mirtazapine are all reported to be beneficial in stopping the hallucinations.

In our case, patient had developed complex visual hallucinations, auditory hallucinations with absent insight after vision loss in both eyes. Her psychotic symptoms were unresponsive to adequate trial of antipsychotics, but resolved completely after cataract surgery.

CBS has been described in most cases where vision loss was irreversible. In this case, vision loss which initially appeared to be irreversible could be corrected and with restoration of vision the hallucinations improved completely.

In older people who are visually impaired, developing visual hallucinations adds the burden of disease. It can also become intimidating for care givers as well as was happening in the present case. Keeping the possibility of CBS is important in providing the care
and reassurance to patient and care givers, who may start fearing insanity.

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