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Case Report

Report of an Atypical Form of Charles Bonnet Syndrome with Specific Characteristics in a Middle-aged Woman with Major Depressive Disorder

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ABSTRACT

Charles Bonnet syndrome is an entity including vivid and complex visual hallucination and has been well known in patients with visual problem. A middle-aged Afghan female refugee with the diagnosis of major depressive disorder who had episodic complex and well formed visual hallucinatory periods with open eyes will be described.
She also experienced auditory and olfactory hallucinations associated with visual hallucination. Hallucinatory experiences described in Charles Bonnet syndrome may exist concurrently with psychiatric disorders such as major depressive disorder. Olfactory hallucination as a symptom of Charles Bonnet syndrome is reported for the first time in our case.

Key words: Major depressive disorder, Charles Bonnet syndrome.

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Vivid and complex visual hallucinations without a known psychopathology have been reported since several hundred years ago. However, there is no consensus on considering these hallucinations as a separate syndrome, the Charles Bonnet syndrome (CBS), and whether eye disease or brain disease is a necessary or exclusive criterion for the diagnosis of this syndrome [1].

Charles Bonnet syndrome is a rare disease which seems to be generally misdiagnosed. It was initially described in 18th century by a philosopher with the same name [2]. In addition to visual impairment, cognitive defects and neurological disorders such as Parkinson's disease, social isolation, and sensory deprivation have also implicated in the etiology of this condition [3]. Some diagnostic criteria used in previously conducted studies have been: complex persistent or repetitive visual hallucinations, full or partial insight, no hallucination in other senses, and lack of delusions [4].

Charles Bonnet syndrome as a condition which may present concurrently with psychiatric disorders has not been well understood yet. Here, we report a case with impression of major depressive disorder and concurrent Charles Bonnet syndrome.

Case history

Thd reported patient was a 50-year-old female, married, illiterate, Afghan refugee. She lived in Kerman, Iran since 10 years earlier and was admitted to psychiatry ward due to severe anxiety and agitation, depressed mood and somatic complaints since 10 months before. She also suffered fatigue, loss of energy, insomnia and loss of interest in her daily activities. At the beginning of her illness, she developed complex, well formed, colorful, and sharp hallucinatory experiences. She had seen sketch men and women who looked like scarecrow and were smaller than their real size. They had horns, large eyes, tall nails and speckled face and gave out a bad scent and

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conducted her to different places. These hallucinatory figures had hostile attitude and had repeatedly threatened the patient and told her that she had to return to Afghanistan. These hallucinatory experiences had occurred involuntarily and lasted for about 1 to 2 hours with her eyes open. She had been alert during episodes and her level of consciousness had not changed. Sometimes she could stop hallucinations by closing her eyes. She had recognized these hallucinatory experiences were unreal. With the increase in the frequency of hallucinatory episodes, patient's depressive symptoms increased.

In mental status examination, the patient was depressed and anxious and her affect was appropriate. Stream and content of thought were normal and there was no evidence of delusions and her cognition and memory were intact. She had full insight. Physical and neurological examinations were unremarkable. Ophthalmologic examination was normal and para-clinic work up including EEG, CT scan and MRI were reported normal. The patient was given trimipramine 50 mg/day and trifluoperazine 5 mg/day. Her condition improved 3 weeks after the beginning of treatment and symptoms of depression and hallucinatory episodes disappeared. Based on DSM IV, the diagnosis of major depressive episode was made. Concurrent impression of Charles-Bonnet syndrome was made which will be discussed below.

Disscusion

Visual hallucinatory experiences in the reported patient resembled hallucinations in Charles Bonnet syndrome. They were well formed, colorful and complex including people and places. Facial hallucinations in Charles Bonnet syndrome were generally distorted or described as ugly, with prominent eyes and teeth and usually as outlines or cartoon-like features [5]. Disappearance of the hallucinations after closing the eyes, just as was seen in our reported case, has been described as one of the additional common characteristics of the hallucinations in Charles Bonnet syndrome [6].

Our patient felt auditory and olfactory hallucinations associated with visual hallucinations. We believe that even though CBS coexists with other types of hallucinations, it should not be excluded as a probable diagnosis, provided that other criteria exist. This is the first report describing olfactory hallucinations in a case of CBS.

In recent years, researchers paid attention to explore the relationship between CBS and patients' mental status. In one study, the mental status of 14 Charles Bonnet hallucinators were assessed using several psychological tests including Beck depression inventory. Results showed that hallucinations were not due to psychopathology [7]. To our knowledge, there was just one report on the coexistence of Charles Bonnet syndrome and major depression. Fong and Wing (1997) reported a middle-aged Chinese man with the impression of major depression and CBS. Their patient also suffered from retinitis pigmentosa. Hallucinations of their patient were related to his cultural background [8]. Similarly; Hallucinations of our patient were influenced by her cultural background. She was an Afghan refugee and had fear of being sent back to her home country. This fear was vividly reflected in her hallucinations theme.

We thought some diagnostic entities should be ruled out in this patient. First, episodic visual hallucinations may occasionally raise the suspicion of an epileptic disorder. Preservation of intellectual competence, the absence of consciousness impairment and the preservation of insight associated with normal EEG ruled out the impression of epilepsy [9]. Hallucinatory episodes which occurred in separate occasions and were associated with no evidence of delusions ruled out major depressive disorder with psychotic feature.

We conclude that Charles Bonnet syndrome as episodic hallucinatory experiences may be present concurrently with psychiatric syndromes. It may include hallucinations in other forms rather than visual field. As with this case, auditory and olfactory hallucinations may also exist. We believe that at least in this

patient, primary complaint had been hallucinatory episodes followed by symptoms of depression. It might have been due to distressing contents of hallucinations which made the patient anxious, insomniac and frightened. Further researches in future may better clarify the relationship between psychiatric disorders and Charles Bonnet syndrome.

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