

CASE REPORT

COMORBID CHARLES BONNET SYNDROME IN TOURETTE DISORDER: A CASE REPORT

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Abstract

Objective: This is a case report discussing about the Charles Bonnet Syndrome (CBS). CBS is a condition in which extremely vivid and well-formed visual hallucinations occur episodically with great profusion. They are typically experienced in clear consciousness, and the insight is either retained or very quickly attained into the unreal nature of the phenomena. ***Method:*** We report a case of a 70 year-old Malaysian male who has been suffering from Tourette disorder for the past 40 years and was blind bilaterally. ***Results:*** He presented with episodic, nocturnal visual hallucinations. These occurred in clear consciousness and the patient's insight to these experiences was retained. There was no history of any other major psychiatric illness in this patient. ***Conclusion:*** This case illustrates a diagnosis of CBS with the differential diagnoses of epilepsy and other organic conditions. *ASEAN Journal of Psychiatry, Vol. 10, No.2, July – Dec 2009 : XX XX*

Keywords: Charles Bonnet Syndrome, Tourette disorder, visual hallucinations

Introduction

The term 'Charles Bonnet Syndrome' was first coined by de Morsier in 1938. It was first described by Charles Bonnet in 1769 who was later reported to have developed the condition himself [1]. This condition is most frequently described in the elderly [2]. It usually occurs in association with visual impairment [3], such as due to macular degeneration in the elderly [4, 5]. Tan et al [6] reported on a series of cases in

Asian patients. Sufferers are otherwise mentally healthy people.

The prevalence of this syndrome ranges from 10% to 40% among visually handicapped people. An Australian study by Vukicevic [7] found a prevalence of 17.5% in their sample of attendees aged 60 and above, at an outpatient ophthalmology clinic in Australia. There is no effective treatment for this condition and most cases abate in a few years.

Case Report

Mr. A, a 70 year-old man, with a 40-year history of Tourette disorder, was admitted to the hospital due to worsening of his Tourette symptoms. He has been suffering from both vocal and motor tics and his condition has been progressively worsening over the years. One of the manifestations of the motor tics is punching his face, and as a result of repeatedly punching his eyes he developed bilateral traumatic cataract and retinal detachment. This resulted in complete bilateral blindness at the age of 60 years.

During the period of his admission, the patient described episodic, nocturnal visual hallucinations, which were extremely vivid lasting about 5 to 15 minutes each time and occurred 3 to 4 times in a week. They usually occurred at night. The visual hallucinations were of elaborate scenes and the patient was able to recall them clearly. They were never accompanied by clouding of consciousness or abnormal perceptions in any other modality. He described the experiences as vivid, detailed and occurring in external space, while recognising them as unreal. At the height of the experience, he sometimes responded to the hallucinations. These experiences never occurred when he was about to sleep or upon waking up and he was unable to consciously control their occurrence or content. The content of the visual hallucinations were usually of continuously changing scenes, for example, scenes of people in the streets, where he described men, women and children carrying grocery bags, school bags, etc. walking past him. The children appeared to be waving at him. Though their lips moved as if in conversation,

there were no sounds. When he attempted to communicate with the figures, they smiled to his questions and kept walking by. At other times, he had visions of beautiful women appearing at his bedside. There was no aura.

The patient was not taking any hallucinogenic drugs or medications that could explain these symptoms. He had no past history of schizophrenia, affective disorder, epilepsy or substance dependence.

In the past 5 years, he has been diagnosed to have hypertension, which is currently under good control with oral atenolol 50mgs daily. There was no history of stroke and he was not known to have any other chronic physical illness. He has undergone multiple ophthalmic surgeries for traumatic cataracts and retinal detachments bilaterally.

There was no family history of psychiatric disorder. His birth, early development and schooling periods were uneventful. After completing his secondary education he was employed as a clerk which he had to quit due to the onset of the blindness.

Mr. A was a heavy smoker and used to consume alcohol regularly in the past. He has, however, abstained completely over the past 5 years. He gave a history of having had multiple sex partners in his 30s and 40s but denied any history of contact with commercial sex workers.

On examination he was an overweight, elderly gentleman, neatly dressed and able to develop rapport. He was forthcoming and able to relate his experiences well giving a detailed

description of his visual experiences. No other types of hallucinations were present and no formal thought disorder. There were no disturbances in his memory or orientation. His judgement and insight were intact. Throughout the interview, the patient exhibited vocal and motor tics.

At night he was noted to be talking to himself. On one instance he was noted to reach out as if touching something in thin air. He explained his behaviour as responding to the hallucinations. At all other times the patient was noted to be cooperative with a pleasant disposition and was compliant to his medication. His cognitive functions were intact at all times. He maintained good personal hygiene and interacted well with the staff and the other patients in the ward.

Physical examination and relevant laboratory investigations were all normal, except for the blindness. Extensive investigations, including a CT scan of the brain had been done 10 years previously and were noted to be normal. A scheduled CT scan was not performed as the patient discharged himself.

He was treated with oral risperidone 2.5 mgs daily in divided doses. The patient had in the past developed severe extrapyramidal symptoms on haloperidol. In addition, he was given benhexol 2 mgs daily and lorazepam 0.5 mgs nocte. There was some clinical improvement noted in that the patient had longer periods in between the tic episodes and he also reported sleeping better in the nights. However there was no appreciable change in his visual hallucinations. The patient requested leave to seek traditional treatment to complement our medication, but

subsequently defaulted the psychiatric treatment, and was lost to follow-up.

Discussion

A diagnosis of co-morbid Charles Bonnet Syndrome in Tourette disorder was made. The differential diagnoses that were entertained were epileptic disorder, another organic condition, for example, Parkinsonism or delirium. The Charles Bonnet Syndrome has been reviewed by Damas-Mora et al [8]. The defining characteristics of the syndrome that differentiate it from epilepsy and other organic disorders have been noted by Lishman [2] and these include:

1. occurrence of visual hallucinations in the elderly,
2. preservation of intellectual competence,
3. absence of impairment of consciousness,
4. preservation of insight,
5. a probable underlying ocular pathology,
6. the quality of the visual hallucinations where the richness of the theme is striking, and
7. the diversity of the hallucinations in the absence of any aura or other accompanying symptoms.

Our patient met all the above criteria.

The exact etiology of the syndrome is not known. It has been described in association with lesions of the visual system as well as in areas not associated with it [6]. To the best of our knowledge this is the first case in the literature where it has been described in a patient with Tourette disorder. It has been also

described in those without any organic or functional psychiatric problems. This led Rosenbaum et al in 1967 to call this condition as 'visual hallucinations in sane people' [1].

There are various other situations in which visual hallucinations have been described in the absence of other psychopathology. These include cultural rituals, childhood imaginary companions, hostages faced with life-threatening situations, sleep-wake transitions (hypnogogic and hypnopompic hallucinations), Parkinsonism and Levodopa-induced hallucinations, to name a few [1].

No treatment of any proven effectiveness is yet available. Trials of haloperidol have only been marginally successful whereas anticonvulsant therapy has demonstrated a slightly more positive response (9). For most patients, the reassurance that they are not mentally ill by doctors who recognize this fact appears to be sufficient.

In conclusion, it is important for the treating doctor to recognize Charles Bonnet Syndrome and its risk factors, such as older age and visual impairment, so as to provide empathy, reassurance and patient education. In patients who do not respond well to the more conservative treatments, a referral to a geriatric psychiatrist would be appropriate [6].

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