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Charles Bonnet Syndrome

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A rare case of Charles Bonnet syndrome, which presented in a 38-year-old man, responded to carbamazepine.
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The term 'Charles Bonnet syndrome' was coined by de Morsier in 1938, after the man who first described, and later himself developed, the condition (Damas-Mora *et al*, 1982). It is characterised by vivid and complex visual hallucinations which are recognised as unreal and occur in the absence of any other psychiatric symptoms. Gold & Rabins (1989) suggested the term may be useful when used in the strict sense of complex visual experiences with insight. The phenomena are, therefore, best described by the term 'pseudohallucinations'. Lishman (1987), however, believed the eponym of doubtful value. The present case report describes a patient who fulfilled the criteria for this syndrome, and demonstrated an unusual treatment response.

Case report

A 38-year-old married businessman of high socioeconomic status presented to the psychiatry out-patients department. He gave a three-year history of increasingly complex visual experiences that he recognised as unreal. These had started as 'beautiful unfamiliar faces' that appeared episodically for up to 60-minute periods. After about a year, he began to see public places which included both familiar and unfamiliar persons. Six months before coming to this hospital, he had also started to see frightening pictures of burning houses, flooded cities, and countries affected by famine, wars, etc. These experiences gradually became more frequent and occurred many times a day. They were never accompanied by clouding of consciousness or abnormal perception in any other modality. He described the experiences as detailed, vivid and occurring in external space, while always recognising them as unreal. He was not able consciously to control their occurrence or content, and described the experience as mostly pleasant. There was no past history of schizophrenia, mood disorder, epilepsy, drug dependence or chronic physical illness.

He was the eldest of three siblings. There was no family history of psychiatric disorder. His birth, early development and schooling were uneventful. He was satisfied with his business. He had been happily married and had two sons. He had no physical problems and was a non-smoker.

On mental state examination, he was a tidy, cooperative man. There was no disturbance in orientation or memory. He described his mood as good and gave a detailed, coherent description of his visual experiences. There were no hallucinations in any other modality. He did not have any formal thought disorder. Insight and judgement were intact. The routine blood and urine examinations, venereal disease research laboratory test, *fundus oculi*,

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electroencephalogram (EEG), and computerised tomography scan were normal. Psychological testing (Rorschach, Thematic Apperception Test IQ on WAIS) was normal.

He was given separate trials of haloperidol, 20 mg daily in divided doses; amitriptyline, 150 mg at night; fluoxetine, 40 mg once daily; and diazepam, 15 mg daily in divided doses, for about four to six weeks but there was no improvement. He was then started on carbamazepine, 100 mg thrice daily, and over the next three weeks there was a reduction in his symptoms. At follow-up three months later, he had had no recurrence of symptoms.

Discussion

The Charles Bonnet syndrome has been described most frequently in elderly people (Hosty, 1990), but the present patient was middle-aged. It usually occurs in association with visual impairment but our patient had no visual disturbances. Although the EEG was normal, his symptoms resolved with carbamazepine. The diversity of pseudohallucinations in the absence of any aura or other accompanying symptoms makes the diagnosis of temporal lobe epilepsy less likely. However, as in many organic states, an antiepileptic drug has been found to be of value in decreasing the mental symptoms (Hosty, 1990).

The exact aetiology of Charles Bonnet syndrome is not known. It has been described in association with lesions of the visual system ranging from the lens of the eye to the occipital cortex, as well as lesions in areas not associated with the visual system (Gold & Rabins, 1989). This syndrome has been described in patients not having any organic or functional psychiatric problem (de Morsier, 1967). This led Rosenbaum *et al* (1987) to give the title 'visual hallucinations in sane people' to this condition.

A number of situations have been described in which visual hallucinations occur without evidence of other psychopathology; these include visions experienced during cultural rituals, childhood imaginary companions, hostage hallucinations associated with life-threatening situations (Siegel, 1984), visions during sleep–wake transitions (hypnogogic and hypnopompic), bereavement hallucinations of widowhood (Alroe & McIntyre, 1983), and Parkinsonism (Mjones, 1949) and levodopa-induced hallucinations (Moskowitz *et al*, 1978).

The Charles Bonnet and Capgras' syndromes are similar in suggesting that multiple brain mechanisms can generate a single psychopathological symptom – in the case of the Charles Bonnet syndrome, visual hallucinations. Other theories of isolated hallucinations have centred on the role of the psyche, conflicts, wishes, and past memories in influencing the content and form of visual hallucinations (Taylor *et al*, 1986). The Charles Bonnet syndrome is an uncommon condition. It is usually self-limiting, even in those cases where the organic lesion is permanent (Kolmel, 1985). Under suspicion of any organic lesion, patients with Charles Bonnet syndrome should be subjected to newer investigative techniques such as magnetic resonance imaging, as in a recent report by Geller & Beller (1987).

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