THE CHALLENGES OF DIAGNOSING AND TREATING CHARLES BONNET SYNDROME

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Background and Aims

Charles Bonnet syndrome (CBS) is characterized by complex visual hallucinations in visually impaired but otherwise psychologically normal individuals¹. CBS is primarily diagnosed in patients with an ophthalmologic disease but is also seen in stroke patients with hemianopsia². The prevalence of CBS varies considerably between studies, ranging from 0.4% to 15% in patients with (partial) vision loss¹. Treatment of these hallucinations is challenging and there is no standardized procedure so far. Here, we present a stroke patient suffering from CBS who was treated successfully with melperone.

Case Report

A 82-year-old female patient with a history of arterial hypertension and diabetes mellitus presented with an acute right-sided loss of vision (figures 1+2). A cerebral MRI revealed an acute ischemic stroke within the left and an old infarction involving the right occipital lobe (figures 3+4). A few days after infarction, she noticed simple geometric shapes in form of ornaments exclusively in her right visual field followed by complex shapes in terms of faces and human bodies moving in a bizarre manner. An electroencephalogram did not show epileptic activity. When she was examined by a psychiatrist, she was fully oriented and without signs of mental illness. These findings allowed diagnosing a CBS according to the criteria of Gold & Rabins³. To treat the hallucinations, a therapy with aripiprazole (5mg daily) was initiated.

Results

The two-month intake of aripiprazole did not reduce the frequency of hallucinations. Therefore a therapy with melperone (25mg daily) was administered resulting in a disappearance of the visual hallucinations.

Conclusion

Melperone might offer a potent treatment in patients with persistent hallucinations. However, its effectiveness has to be proved in a larger cohort of CBS-patients.

Figures 1 + 2:

Perimetry showing the right-sided hemianopsia after the patient's stroke. 1: Right eye. 2: Left eye.

Figures 3 + 4:

MRI imaging showed an acute left occipital lobe ischemic infarction as seen in the (3) flair sequence and (4) diffusion weighted imaging. An old middle cerebral artery stroke on the right side was also detected.

Sources:

¹Teunisse RJ, Cruysberg JR, Hoefnagels WH, Verbeek AL, Zitman FG. Visual hallucinations in psychologically normal people: Charles Bonnet's syndrome. *Lancet Lond Engl*. 1996;347:794-797

²Ashwin PT, Tsaloumas MD. Complex visual hallucinations (Charles Bonnet syndrome) in the hemianopic visual field following occipital infarction. *J Neurol Sci*. 2007;263:184-186

³Gold K, Rabins PV. Isolated visual hallucinations and the Charles Bonnet syndrome: A review of the literature and presentation of six cases. *Compr Psychiatry*. 1989;30:90-98