# Charles Bonnet Syndrome: a prodromal stage of Lewy Body Dementia?

Matheus H.L. Arts<sup>1</sup>, Linda de Jonge<sup>2</sup>, Sergei I. Petrykiv<sup>3</sup>

## Introduction:

Charles Bonnet Syndrome (CBS) is a disorder in older adults, and is characterized by a triad of recurrent vivid visual hallucinations, ocular pathology causing visual impairment due to lesions in central or peripheral visual pathways, and normal cognitive status. It is often misdiagnosed as a psychosis or a drug related condition. CBS was anecdotally reported as a prodromal stage of early dementia. In dementia with Lewy bodies (LBD), complex visual hallucinations are common symptoms and have been identified as one of the core features of LBD. In some cases, the differential diagnosis with other pathological conditions causing hallucinations in older adults, including CBS, can be difficult. In this paper, we will present an older adult with LBD.

### **Methods:**

In this article we present a case report, describing CBS as a prodromal stage of LBD.

#### **Results:**

An 68-year old female was admitted to hospital for persistent vivid visual hallucinations. There was no past personal or family history of mental illness. Ophthalmological examination showed visual impairment due to age related macular degeneration and she was diagnosed with CBS. After three months, on neurological examination we observed discrete balance problems and rigidity, the patients MMSE score was 25/30. Treatment with antipsychotics proved not to be effective and instead increased muscle rigidity. During the next months, we noticed progressive cognitive decline with other core features of LBD including fluctuating cognition with pronounced variations in attention and alertness, recurrent visual hallucinations, and spontaneous motor features of parkinsonism.

## **Conclusions:**

Our case report confirms the relevance of hallucinations as an possible early predictor of LBD. All core features of LBD (fluctuations, parkinsonism, and hallucinations) were present. CBS is a rare disorder that may represent a prodromal stage of LBD. However, there is some overlap in symptoms between these two disorders, making a correct diagnosis difficult, particularly in early stages of dementia.

#### Sources:

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<sup>&</sup>lt;sup>1</sup>Mental Health Care –West Northern Brabant (GGZ-WNB), Department of Old Age Psychiatry and Neuropsychiatry, Halsteren, the Netherlands

<sup>&</sup>lt;sup>2</sup>Leonardo Scientific Research Institute, Department of Neuropsychiatry, Groningen, the Netherlands

<sup>&</sup>lt;sup>3</sup>University of Maastricht, Maastricht University Medical Centre, Department of Clinical Pharmacy and Pharmacology, Maastricht, the Netherlands