

## Case Report

# Charles Bonnet's Syndrome: A Case Report from Brazzaville (Congo)

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## ABSTRACT

The Charles Bonnet's syndrome (CBS) is a set of complex hallucinations, strictly visual, occurring at any age in the absence of any neuropsychiatric disorder. These hallucinations are the consequences of a profound impairment of vision, usually following a cataract, glaucoma or macular degeneration. Its prevalence is probably underestimated. The poor knowledge of this syndrome by the health personnel is the main reason for diagnostics errors and erroneous treatment in the presence of hallucinations in the elderly. Furthermore, many patients prefer living without talking about the hallucinations, because of fear to be considered as insane or a person with a serious psychiatric illness such as Alzheimer's disease. Here, we report the first documented case of CBS linked to cataract in the University Hospital of Brazzaville (UHB) in a patient of 84 years.

**KEYWORDS:** Charles Bonnet's Syndrome, Visual hallucinations

## INTRODUCTION

The CBS is a set of complex visual hallucinations occurring at any age without mental disorders [1]. The disease was first described by Charles Bonnet in 1760 [2]. The Switzerland nartulariste had described the clinical signs presented by his own grandfather. The latter was 87 years old, he was in state of blindness on both sides due to cataract. But he said see characters, birds, buildings...In most cases, patients with CBS are visually impaired due to aging of the eye (cataracts, macular degeneration) [1]. This disease is little known to the medical community that explains the diagnostics errors and often erroneous treatment in the presence of hallucinations in the elderly. The exact prevalence is unknown, but is probably underestimated. Indeed, fear to pass for crazy or people with psychiatric illness, most patients choose to live without talking about their hallucinations [1, 2]. We report the first documented case of CBS in UHB.

## CASE REPORT

A patient of 84 years had presented, according to his entourage, visual hallucinations for nearly two months in 2014. In fact, she said see her husband died more than 10 years. Regularly she described, inter alia, the presence of a snowman in front of her house and the presence of a herd of gorillas in his neighborhood while, living thousands of kilometers away from the nearest forest.

She was examined by a doctor who first raised the diagnosis of bipolar disorder. She was placed under appropriate treatment. No improvement had been noted on the contrary, the patient was increasingly tired and sleepy.

This treatment was stopped by a second doctor, who in turn put the diagnosis of Alzheimer's disease . This diagnosis was challenged by the entourage who had said that old woman had her full mental capacity. She had no problem with amnesia neither in time nor in space.

Two months after the beginning of these troubles, the entourage found out that the patient was very clumsy in executing the basic tasks of everyday life. Like taking her plate at the table. She was taken to the ophthalmologist. Its status (on both sides) was as follows:

- Distance visual acuity limited to counting fingers at 20 cm,
- White cataract,
- Fundus a little difficult, however the retina and the macula were normal,
- Eye tonus 13 mm Hg, and 0.4 of papillary excavation.

Cataract surgery has been performed on both sides at an interval of one month. The postoperative status (after 1 month) on both sides had noted 10/10 of corrected visual acuity.

The entourage noted that since the first eye surgery hallucinations had completely disappeared. The patient had resumed normal daily life in relation to her age. The diagnosis of CBS secondary to cataract was retained.

## DISCUSSION

The CBS is frequently experienced by people living with significant vision loss. This syndrome is characterized by temporary visual hallucinations. The pictures tend to arise a few months after the deterioration of vision [1]. They can take many forms, from simple lines and configurations detailed images of people or landscapes [1, 2]. Hallucinations can be very sharp, even in people who have lost a lot of vision and whose normal vision was not very clear. These representations can arise at any time and last from minutes to hours.

This syndrome is actually quite common due to the aging of the population marked by the significant improvement in life expectancy. But it remains poorly known by the medical community. The percentage of victims of a hallucination increases with the importance of vision loss [1].

Most often, patients are seniors but the syndrome can occur at any age [1]. Hallucinations seem to appear more often at night when the person is quite in low excitation state. Some studies report the fact of living alone is one of predisposing factor for the onset of this syndrome.

The main pathologies found behind the CBS are macular degeneration cataracts glaucoma and diabetic retinopathy. The diagnosis of CBS is retained after eliminating all other causes of hallucinations like: the syndrome of Alice in Wonderland, bipolar disorder and Alzheimer's disease.

In the Alice in Wonderland syndrome hallucinations are not only visual, may also interest other senses like hearing. Also in this syndrome ophthalmological examination is perfectly normal [3].

In bipolar disorder, whatever its cause, the patient denies his/her disease [4]. In the CBS the patient is aware of his suffering, sometimes he/she is ashamed to talk about it for the fear of being taken as crazy.

Alzheimer's disease is also linked to older age as in most cases of CBS. The fundamental difference is due to the fact that amnesia which is the capital sign of Alzheimer's disease is absent during CBS, and ophthalmological examination can be normal [5].

Due to the insufficient of knowledge and the lack of neurophysiological exploration, particularly in poor countries, some patients suffering from CBS are treated wrongly as psychotic.

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