## What You Should Know About the Charles Bonnet Syndrome

By David J. Browning MD, PhD

The Charles Bonnet syndrome is a condition in which patients with visual impairment have hallucinations. Because older patients have a higher prevalence of eye disease, Charles Bonnet syndrome is more frequent in the elderly. However, it can be seen in the young as well. It is commonly seen in patients with macular degeneration, advanced glaucoma, or in patients who have lost visual field through strokes.(1,2)

The hallucinations can be complex, often involving people, animals, or tapestries, and may have interactive elements. Sometimes they are geometric and show triangles or branching figures. The patient is aware that he is experiencing something that is not real.

Charles Bonnet syndrome is a diagnosis of exclusion. It is necessary to rule out other causes of hallucinations such as drugs, brain disease, or mental illness (e.g., schizophrenia). The condition was first described in 1760 by the Swiss scientist, Charles Bonnet, who witnessed it in his grandfather who had a visual loss. It can also occur in conditions not characterized by visual loss such as Parkinson's disease or Alzheimer's disease.

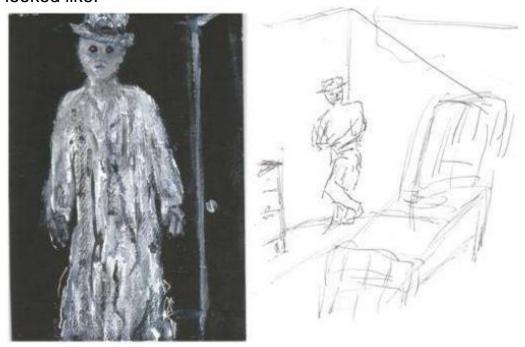
Patients are often reluctant to admit that they are having visual hallucinations. In one study, only 9% of patients with Charles Bonnet syndrome told their doctors about the situation. Many patients withhold information because they are afraid that people will think they are crazy. It is not necessary that patients lose visual acuity to have the

hallucinations of this syndrome. Loss of visual field despite good acuity has also been associated with the syndrome.

Treatment involves education of the patient about the nature of the condition. Sometimes interrupting the hallucination by closing the eyes, or seeking conversation with other people can be helpful. Over time the episodes often become less frequent.

One of my patients wrote a letter explaining her symptoms; parts of this letter may be useful to share. She described that during the night she saw a ghostly figure in a long white garment, sometimes with a hat, standing inside her bedroom door staring at her. At other times the figure wore a colorful polka - dot outfit and a black hat. Sometimes the figure was accompanied by other figures, males or females, lounging in the room, somewhat entangled, which made her think that they might be having an orgy.

This patient was an artist and illustrated what her hallucinations looked like:



**Legend:** Painting (left) and sketch(right) of a visual hallucination seen by an 84 year old artist with age-related macular degeneration.

She mentioned that the first episodes were scary, but that as he became a regular visitor and was non-threatening, just annoying, she began to talk to him, asking how did you get here? She also learned to cope by pointing a flashlight at him, which caused him to cower and leave. Sometimes she would slowly get up from the bed and

approached him with a golf club. He looked at her and sneaked out the door. Another time, she saw a tiger lying beside the bed that moved when she reached over to stroke its fur. She initially had these episodes 2-3 times a week, then the frequency decreased to 2-3 times a month, and later became even less frequent. My patient had a familiar concern. She wrote, "I feared all would be convinced I am a pothead or totally cracked up".

In summary, the Charles Bonnet syndrome is a common part of advanced macular degeneration and other eye diseases. It is a benign condition, which, with understanding, frequently becomes less of a problem.

After you read this document, if you have further questions, please visit my website at www.retinareference.com. Another excellent resource for medical literature is Pubmed, on the National Library of Medicine website, accessible at <a href="https://www.pubmed.com">www.pubmed.com</a>.

## References

- 1. Tan CS, Young VK, and Au Eong KG. Onset of Charles Bonnet syndrome (formed visual hallucinations) following bilateral laser peripheral iridotomies. Eye 18, 647-649. 2004.
- 2. Menon GJ. Complex visual hallucinations in the visually impaired: a structured history-taking approach. Arch Ophthalmol 123, 349-355. 2005.

Last updated 10/25/2017