

## Charles Bonnet Syndrome (CBS)

Charles Bonnet Syndrome (CBS) is a condition which involves the onset of complex and vivid hallucinations in the absence of dementia and psychiatric issues. CBS is seen in patients with severe vision loss who have lost their sight later in life. Though it may occur in younger individuals, CBS occurs more commonly in the elderly, who are at higher risk for vision loss. Some of the causes of vision loss include macular degeneration, dense cataracts, and diabetic retinopathy.

The images that these individuals perceive are defined as pseudo-hallucinations. Those experiencing CBS realise and recognise the unreality of the vision thus called "pseudo". There are two types of visual hallucinations: formed and unformed. Formed hallucinations include things such as people, animals, plants, buildings, and geometrical designs. Sometimes people may see dancing children or trees which might pop up in front of them. The unformed hallucinations that some people experience are blinking lights and/or blobs of colour. Either of these hallucinations may last from a few seconds to most of the day. These images may change in frequency and into more complex images over time. However, these hallucinations usually disappear within 12-18 months in most people.

Patients who experience CBS deal with various emotional reactions. They may react with indifference, surprise, curiosity and/or amazement or delight. These perceived images are generally pleasant and very rarely do individuals experience fear with these hallucinations. Unfortunately, these experiences can increase the emotional stress for these individuals. They sometimes avoid telling others in fear of being labelled crazy, misdiagnosed by their doctor, or ostracized by their friends and family. This can worsen their quality of life and put them into a distressed state.

At this time, the cause of CBS is not fully understood. One of the theories is the sensory deprivation phenomena. This is similar to the phantom limb sensation. People who have had a limb amputated still may feel their fingers or an itching of their arm that is no longer there. This happens because the nerves where the limb used to send messages to the brain, and the brain interprets this as a sensation. With CBS, the retinal cells no longer work, but the visual system still tries sending messages to the brain which results in visual images.

There is no concrete cure for CBS. There are a few factors that reduce the duration of hallucinations. Those experiencing CBS should try and focus on other tasks. If the hallucinations happen in the dark, then switch the lights on or visa versa. Moving your eyes around may also help reduce the visual images. Other means of trying to reduce the duration of hallucinations is moving around and/or shouting at the image.

The current management of Charles Bonnet Syndrome is reassurance. For most people, knowing that CBS is caused by poor vision and not a mental disease can help them to better understand and cope with the condition. With some individuals, there is a possibility of increasing the sensory stimulation. This can sometimes be done by the correction of the visual impairment by means of optical devices or surgery. At times, optical aides such as low vision devices can be helpful. Unfortunately, sometimes for individuals, reassurance is not enough for their visual impairment and hallucinations and cannot be rectified by means of surgery or visual aids. Talking with your GP, counsellor, or psychologist can help provide means of coping with CBS.