I'm human



Chloropsia guide

Purpose: A very rare clinical finding called chloropsia, which affects how people see colors, has been reported in a case study. In this study, a patient's main symptom was seeing everything as light green and oval-shaped. Observations: The patient was a 66-year-old doctor who had previously suffered from advanced eye problems due to glaucoma. He experienced sudden and widespread chloropsia without taking any drugs that could alter his color perception or having any known mental health issues. Conclusions and importance: Our findings confirm all the diagnostic criteria for Charles Bonnet syndrome, despite chloropsia not being associated with this condition before. Doctors should be aware of altered color perception in patients, especially if it cannot be explained by other factors, as this could indicate Charles Bonnet syndrome. Color perception can be altered due to various factors, resulting in temporary or permanent changes to a person's visual experience. These alterations can occur through damage to the photoreceptors or ganglion cells in the retina or as a result of brain conditions. Depending on the location and severity of the damage, there are three main types of chromatopsia: Central (cerebral), Optical, and Retinal. Central (cerebral) chromatopsias can be caused by neurological disorders such as cerebrovascular accidents, psychiatric conditions, tumors, or toxic conditions, including drug-induced effects. This type of chromatopsia can also occur in conditions where the visual cortex "compensates" for areas lacking sensors, leading to hallucinations. Optical (corneal) chromatopsias are related to corneal opacities or interventions such as cataract extraction, fluorescein angiography, or jaundice. Prolonged exposure to intense UV light can cause erythropsis, where the person perceives red vision. Retinal chromatopsias frequently occur due to macular edema or retinal hemorrhages, which can generate toxicity on the photoreceptors. S-cones, responsible for perceiving blue/purple hues, are particularly vulnerable to oxidative damage from heme iron, leading to erythropoietin. Various factors can contribute to chromatopsia, including: * Medicines and toxins: Digitalis, phenothiazines, sildenafil, carbon monoxide, heavy metals, and pesticides can accumulate in the retina or affect its function. * Metabolic and hormonal disorders: Diabetes, liver diseases, hyperthyroidism, and other conditions can alter color perception by damaging the small blood vessels in the retina or affecting the concentrations of certain substances in the blood. * Ophthalmological conditions: Cataracts, macular degeneration, age-related macular degeneration (AMD), and other eye disorders can cause chromatopsia. A small study indicates that retinal pathology is present in more than 50% of patients with chromatopsia. Chromatopsia, a rare color vision anomaly, affects certain parts of the retina, leading to altered color perception and aberrations like xanthopsia. Diabetic retinopathy causes colored halos in patients' vision, particularly in advanced stages. Prolonged exposure to intense light, especially UV, can cause temporary blue or red tint in the visual field. Staring at intense white or UV sources can also lead to a temporary colored tint. Chromatopsia is common after cataract surgery due to changes in light transmission and color perception. A thorough evaluation, including medical history and visual tests, diagnoses this condition. In most cases, it resolves once the underlying cause is removed, but its prognosis varies depending on the cause.