

Visual Hallucinations Following Pituitary Meningioma Resection: Charles Bonnet Syndrome

Chandni Patel, DO¹; Caroline Varlotta, DO¹; Laurenie Louissaint, MD¹; Sofia Barchuk, DO¹; Kirk Lercher, MD¹

¹Mount Sinai Icahn School of Medicine – Department of Rehabilitation and Human Performance

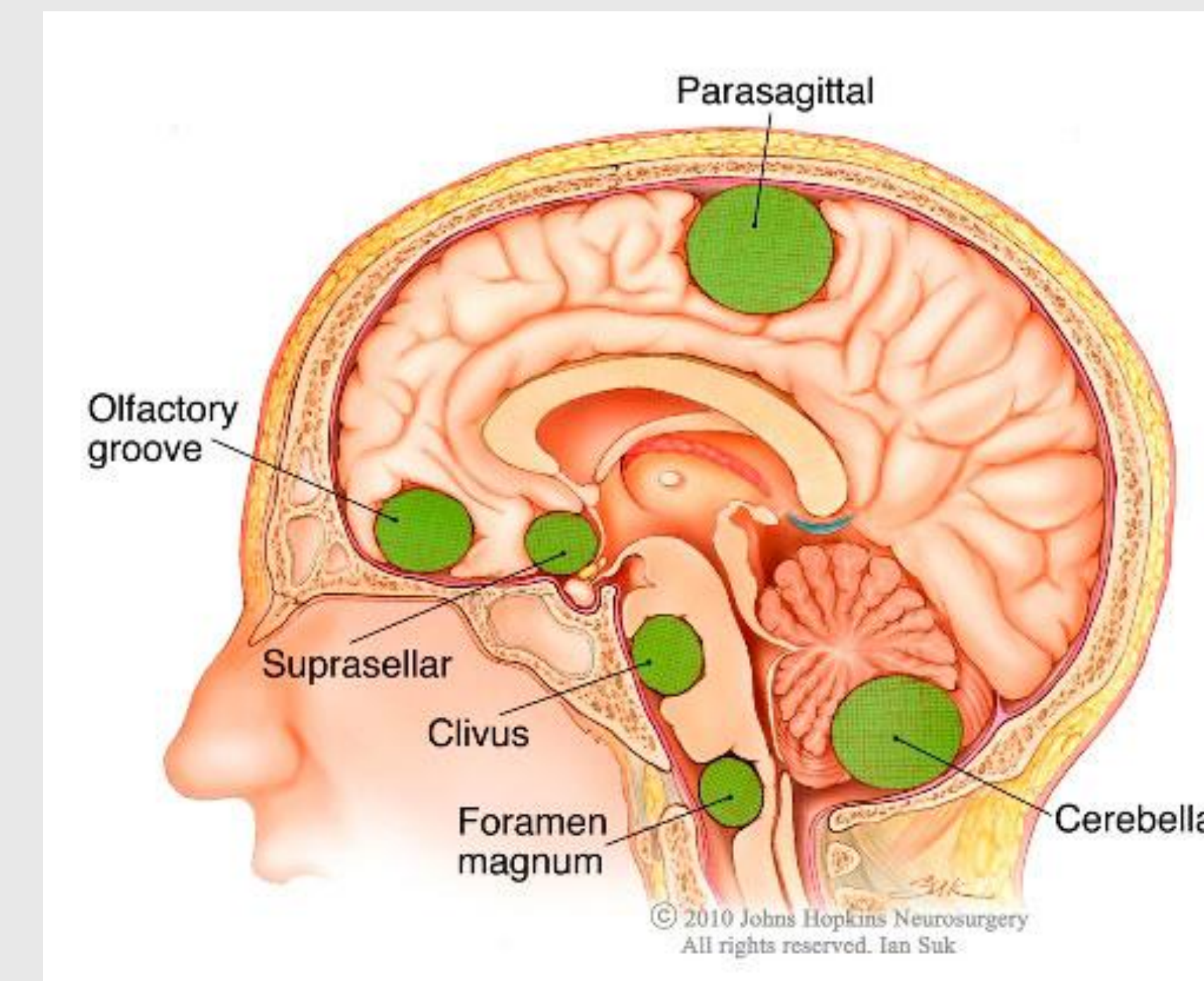
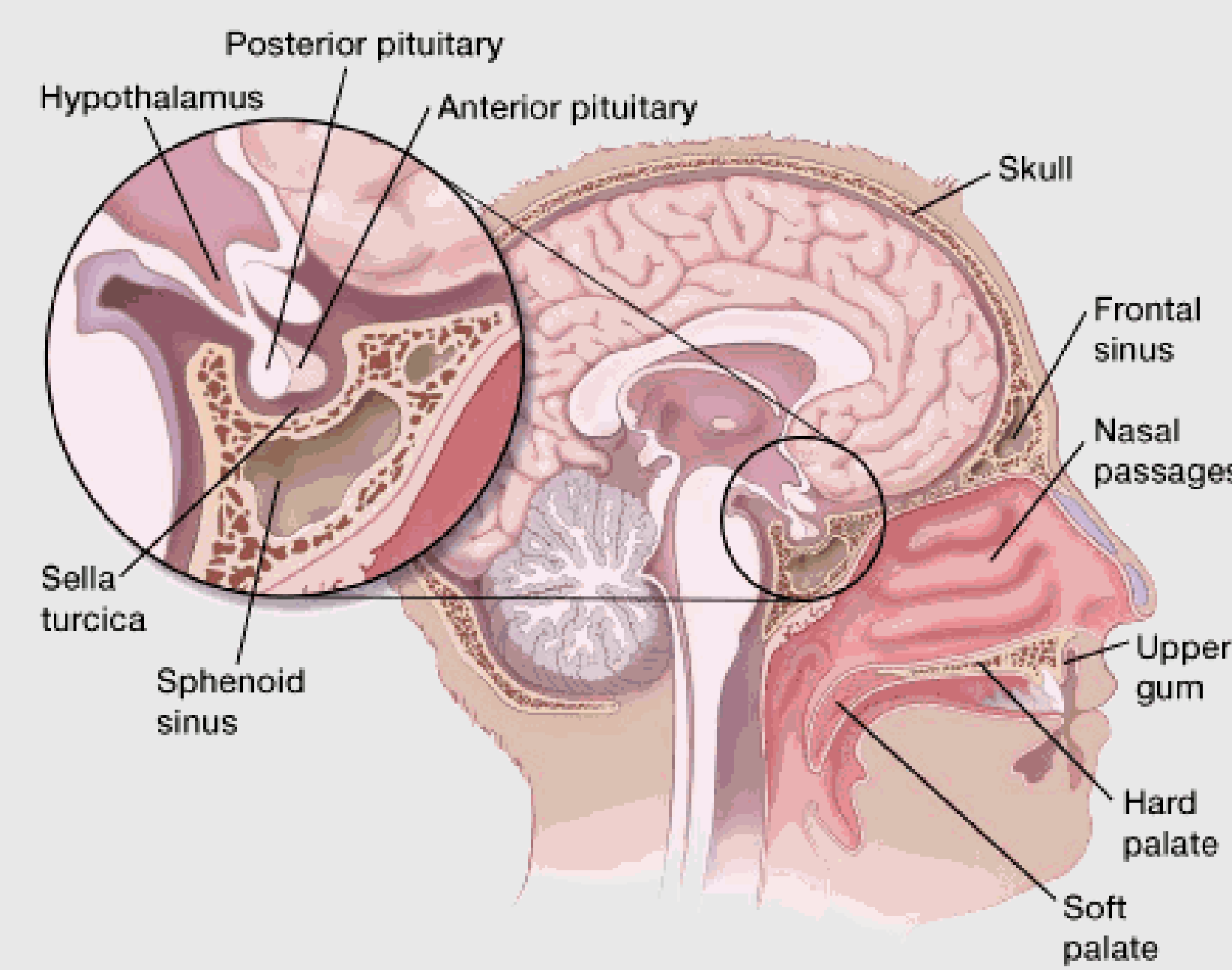
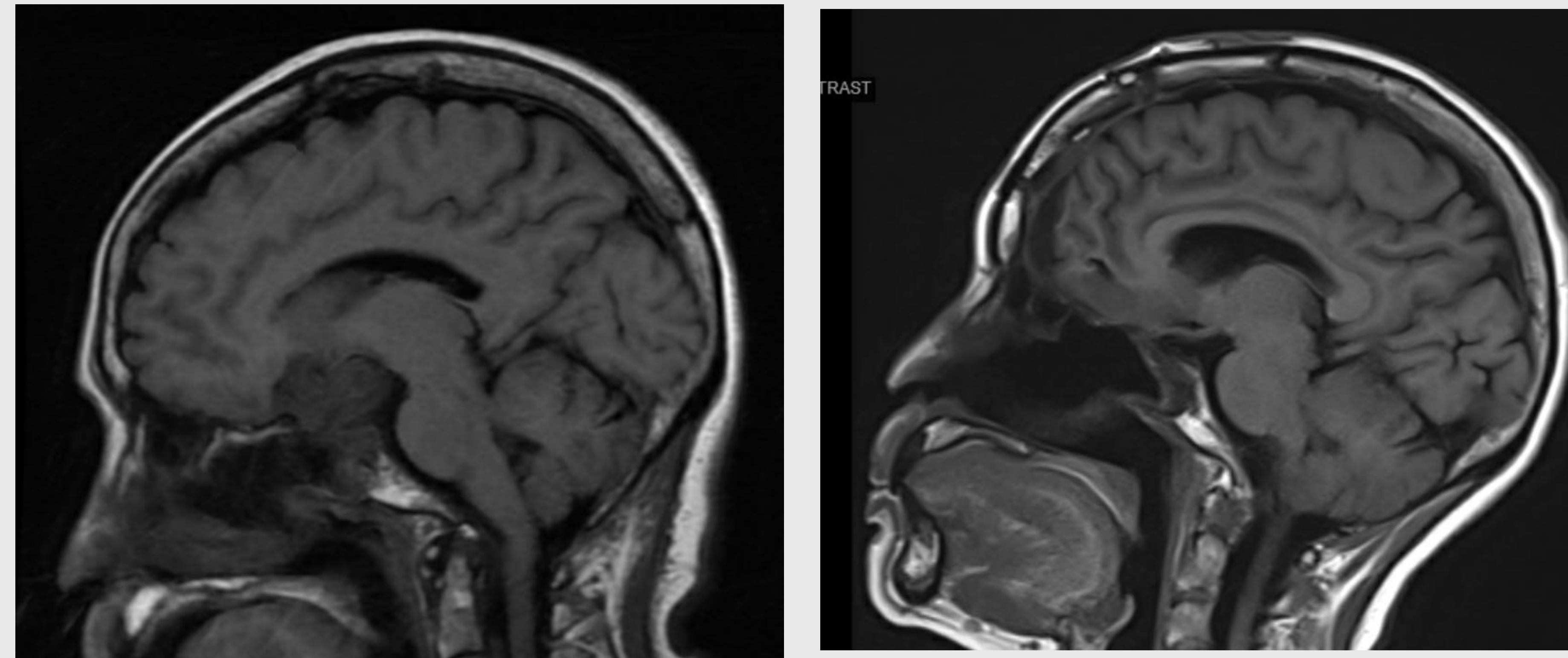
Introduction

Patients with traumatic brain injury may experience neuropsychiatric complications following their injury. Common complications include agitation, depression, phobias, generalized anxiety disorder, and hallucinations. Inpatient workup is recommended to optimally manage patient symptoms which may be debilitating and interfering with therapy.

Case Presentation

A 62 year old female with a past medical history of cataracts and endometrial cancer presented with profound vision loss found to be due to pituitary meningioma. After meningioma resection, the patient was admitted to acute inpatient rehabilitation. Inpatient, she endorsed having visual hallucinations of children from her past employment as a nanny. She was aware these hallucinations were not real and non-bothersome. Imaging demonstrated no acute pathology and the side effect profile of her medications did not explain her complaints. Psychiatry did not find evidence of psychosis. Neurological causes were ruled out based upon history, exam, imaging and EEG findings. Due to the presence of insight into her hallucinations and normal mental status exam, the patient was diagnosed with Charles Bonnet Syndrome (CBS).

Figures



Discussion

CBS is characterized by visual hallucinations resulting from vision loss. The hallucinations are visual and benign. Most patients report seeing people, animals, or flowers. CBS is distinguished from other causes of visual hallucinations, such as psychosis and delirium, due to the patient's insight the hallucinations are not real and non-threatening. The release phenomenon theorizes the lack of external visual information from damage to the visual pathway prevents inhibition of the normal circuitry, resulting in inappropriate excitation of visual association cortices. Subsequently, visual hallucinations are released from the subconscious to conscious. The mainstay management is patient education and maximizing remaining vision with optic aids and rehabilitation. There is no indicated pharmacotherapy.

Conclusion

As the presence of elderly patients in acute rehabilitation rise, the incidence of CBS may proportionally rise due to increased visual loss from age-related conditions. Inclusion of CBS in the differential of patients with visual hallucinations may facilitate incorporation of vision rehabilitation to develop strategies to overcome visual deficits, decrease anxiety, prevent unnecessary psychiatric or medical treatment, and improve quality of life.

References

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