

BALINT'S SYNDROME

WHAT IS IT?

Balint's syndrome is a rare neurological condition that affects a person's visual and spatial coordination. Often, it is described as a visual disturbance – the person is able to see and has functional eyes; however, they have trouble processing visual input and interacting with what they see.



SYMPTOMS

The following triad of symptoms are shown with Balint's syndrome:

Simultanagnosia

The inability to perceive more than one object simultaneously and to see the whole picture of the visual field. For example, given a picture of a forest, the person can see each individual tree but is unable to identify the entire forest.



Optic Ataxia

The lack coordination between visual inputs and motor outputs. In other words, a person is unable to accurately reach for a visual object of interest. There is also trouble with hand orientation and grip formation.



Oculomotor Apraxia

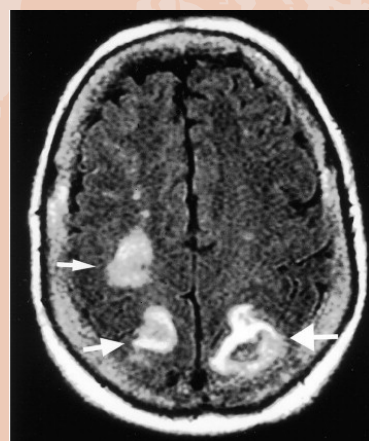
The inability to intentionally gaze at an object of interest despite the functional extraocular muscle.



CAUSE

Often, Balint's syndrome is caused by bilateral symmetric lesions in the parietal and occipital areas. The parietal lobes are responsible for body and spatial awareness and the occipital lobe is where visual processing occurs.

Sudden symptoms are likely caused by a strokes, where at least two take place at around the same place in each hemisphere of the brain. Other possible causes include tumors, traumatic brain injuries, and Alzheimer's disease.



DIAGNOSIS

As there is nothing wrong with a person's vision with Balint's syndrome, a neurologist is likely to be referred to.

Neurological testing with certain tools are used to determine the presence of simultanagnosia, optic ataxia, and oculomotor apraxia.

Brain imaging tests, such as using an MRI test may be done to show and locate damage to the lobes.



TREATMENT

The main course of treatment for Balint's syndrome is rehabilitation, including training the impaired function or damaged part of the brain (restoration) and compensating the loss of a function by improving an intact one (compensation).

Another approach involves taking on multiple tasks through strategic learning.



References

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