Gerstmann Syndrome Neuropsychology

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What is Gerstmann Syndrome?

It is a rare neurological disorder named after the Austrian neurologist, **Joseph Gerstmann**

What causes Gerstmann Syndrome?

It is typically secondary to brain damage caused by a stroke or lesion in the **middle cerebral artery**, affecting the **dominant parietal lobe of the brain**, in the area around the **angular gyrus**. However, Developmental Gerstmann Syndrome has also been reported.

Symptoms of Gerstmann Syndrome

- difficulty with calculations (acalculia/dyscalculia)
- inability to distinguish between fingers of the same hand (finger agnosia)
- difficulty with writing (agraphia)
- disorientation of the right and left sides of the body

Other deficits with Gerstmann Syndrome

Individuals with Gerstmann Syndrome may also experience other deficits such as problems with memory or difficulty with speech and comprehension (aphasia). They may have difficulty with other basic activities such as grooming and dressing.

Additionally, they may have difficulty recognising faces, and with spatial orientation.

People with Gerstmann Syndrome may also have a poor sense of direction, as well as difficulty with fine motor skills and visual-motor integration.

In severe cases, Gerstmann Syndrome can lead to problems with coordination, balance, and gait.

Treatment and rehabilitation for Gerstmann Syndrome

Treatment and rehabilitation typically requires a multi-pronged approach focused on addressing the **underlying cause**, such as a stroke or brain lesion.

The primary goal of treatment is to improve the **individual's ability to perform basic activities of daily living and communication**.

This is done by strengthening the individual's motor and cognitive abilities through physical and occupational therapy, and providing education and support to family members to help the person cope with the disorder.

Speech and language therapy may also be beneficial in improving an individual's ability to communicate.

Not a widely recognised diagnosis

It's important to note that Gerstmann syndrome is **not a widely recognised diagnosis**, and some of the components of the syndrome have been described as separate entities such as acalculia, agraphia, agnosia, and left-right disorientation individually.

In fact, some experts suggest that Gerstmann syndrome may not be a distinct disorder, but rather a combination of separate neurological conditions, such as acalculia, agraphia, agnosia, and left-right disorientation, that can occur independently of one another.

Gerstmann Syndrome Videos

A patient exhibiting Gerstmann Syndrome

Embedded media: https://www.youtube-nocookie.com/embed/GLJdcmSIoNQ?controls=0

Gerstmann Syndrome following stroke: Case Presentation

Embedded media: https://www.youtube-nocookie.com/embed/LC5Qs2h2HQ0?controls=0