The Imposter Delusion: Unraveling Capgras Syndrome

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Key points:

- Introduction
- Etiology
- Pathophysiology
- Clinical Features
- Diagnosis
- Treatment
- Clinical Significance

Introduction

Capgras syndrome is a rare neuropsychiatric disorder characterized by the delusional belief that a familiar person has been replaced by an identical imposter. It belongs to the group of delusional misidentification syndromes and is commonly associated with conditions such as schizophrenia, dementia, epilepsy, and traumatic brain injury. The syndrome was first described by Joseph Capgras and Jean Reboul-Lachaux in 1923.[1] Although uncommon, Capgras syndrome provides valuable insight into the relationship between facial recognition, emotional processing, and psychosis, making it an important condition in both psychiatry and neurology.[2]

Etiology and Pathophysiology

The exact cause of Capgras syndrome remains unclear, but current evidence suggests it results from disrupted communication between the brain regions responsible for facial recognition and those involved in emotional processing.[3] As a result, patients can recognize familiar faces but fail to experience the normal sense of familiarity, leading to the belief that the person has been replaced by an imposter. Neuroimaging studies have reported abnormalities in the frontal and temporal lobes, particularly in the right hemisphere.[4] Capgras syndrome has also been associated with several neurological conditions, including Alzheimer disease and Lewy body dementia.[5]

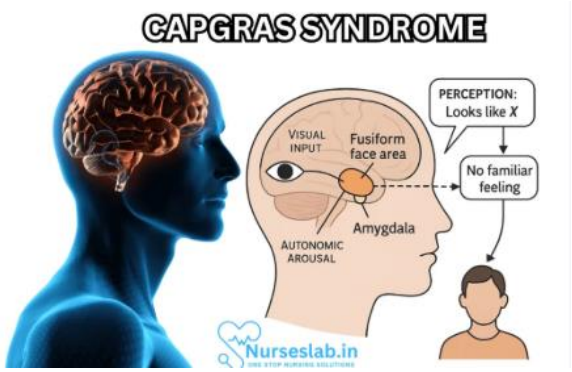


Figure 1: *Capgras Syndrome.*[16]

Clinical Features

Patients with Capgras syndrome commonly believe that a spouse, family member, or close friend has been replaced by an identical imposter. In some cases, the delusion may also involve pets or inanimate objects.[6] Common clinical features include paranoia, anxiety, social withdrawal, aggressive behavior, and other psychotic symptoms. Depending on the underlying condition, patients may also experience hallucinations, memory impairment, cognitive decline, seizures, or other neurological manifestations.[7]

Diagnosis

The diagnosis of Capgras syndrome is primarily based on a thorough psychiatric and neurological assessment. Mental status examination typically reveals a persistent delusional belief despite preserved orientation and level of consciousness. Brain imaging, including magnetic resonance imaging (MRI) and computed tomography (CT), may help identify underlying structural abnormalities, particularly in the frontal or temporal lobes.[8] Differential diagnoses include schizophrenia, dementia, delirium, prosopagnosia, and other delusional misidentification syndromes, such as Fregoli syndrome.[9]

Management and Treatment

Management of Capgras syndrome depends on the underlying cause and the severity of symptoms. Antipsychotic medications, including risperidone, olanzapine, and quetiapine, are commonly used in patients with psychotic symptoms.[10] Cognitive behavioral therapy (CBT) may help improve insight and reduce distress in selected patients. In individuals with dementia, management focuses on reassurance, environmental support, and caregiver education.[11] When Capgras syndrome is associated with neurological disorders such as epilepsy or traumatic brain injury, treatment should target the underlying condition. A multidisciplinary approach involving psychiatrists, neurologists, and psychologists is often recommended to achieve the best clinical outcomes.[12]

Clinical Importance

Capgras syndrome provides valuable insight into the role of emotional processing in facial recognition and identity perception. Research suggests that both neurobiological abnormalities and psychological factors contribute to its development, improving our understanding of delusional disorders and brain function.[13] The condition also emphasizes the importance of early recognition, empathy, and caregiver education, as affected individuals may experience significant distress and, in some cases, display fear or aggression toward familiar people.[14]

Conclusion

Capgras syndrome is a rare but clinically important neuropsychiatric disorder characterized by delusional misidentification. It highlights the complex relationship between cognition, emotional processing, and perception. Early recognition, accurate diagnosis, and a multidisciplinary approach to management are essential for improving patient outcomes. Continued research into its underlying neurobiological mechanisms may enhance our understanding of the disorder and support the development of more effective treatment strategies.[15]

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