

# Semantic Variant Frontotemporal Dementia: A Case Report

Muhammed Emin Boylu<sup>1,2\*</sup>, İsmet Kırpınar<sup>2</sup>

<sup>1</sup> Council of Forensic Medicine, Psychiatry Department, İstanbul, Turkey

<sup>2</sup> Bezmialem Vakıf University, Faculty of Medicine, Psychiatry Department, İstanbul, Turkey

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## Abstract

**Background:** Frontotemporal dementia (FTD) is a neurodegenerative condition marked by progressive impairments in behavior, executive function, or language, and is a leading cause of early-onset dementia, affecting 4% of the dementia population and up to 30% of cases before age 65. FTD presents significant diagnostic challenges due to its neuropsychiatric symptoms mimicking psychiatric disorders. It manifests in three variants: behavioral-based, primary progressive aphasia, and semantic-type dementia. Typically, the disease spans 6-8 years from onset to death, with symptoms like apathy, disinhibition, and agitation.

**Case report:** The case report details a 55-year-old woman who displayed initial symptoms of

forgetfulness and disorganized behavior. Despite normal MRI results, further evaluations indicated impaired verbal memory and significant hypometabolism in brain regions consistent with FTD, leading to a diagnosis of the semantic variant of FTD. Diagnosing FTD is complex due to symptom overlap with psychiatric disorders, especially in early stages where cognitive deficits may not be pronounced. Advances in imaging and molecular characterization have improved diagnostic accuracy. The prevalent manifestation of the semantic variant includes language abnormalities and word-related memory loss, while executive dysfunctions are typical. Misdiagnosis can delay effective treatment, highlighting the importance of considering FTD

in middle-aged patients with new neuropsychiatric symptoms.

**Conclusion:** The intricate relationship between FTD and other neurodegenerative or psychiatric conditions further complicates diagnosis, underscoring the necessity for thorough neurodegenerative disease assessments in relevant patients.