Imaging frontotemporal lobar degeneration.

The term frontotemporal lobar degeneration (FTLD) refers to a group of neurodegenerative disorders that target the frontal and temporal lobes. It accounts for approximately 10% of pathologically confirmed dementias but has been demonstrated to be as prevalent as Alzheimer's disease in patients below the age of 65. The 3 major clinical syndromes associated with FTLD include behavioral variant frontotemporal dementia, semantic and nonfluent variants of primary progressive aphasia. The more recently introduced term logopenic variant appears to represent an atypical form of Alzheimer's disease in the majority of cases. The neuropathology underlying these clinical syndromes is very heterogeneous and does not correlate well with the clinical phenotype. This causes great difficulties in early and reliable diagnosis and treatment of FTLD. However, significant advances have been made in recent years via the application of magnetic resonance imaging and positron emission tomography imaging methods as biomarkers. The current review aims to provide a synopsis on the value of magnetic resonance imaging-based and molecular imaging procedures in FTLD.