Alzheimer Society

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Limbic-predominant age-related TDP-43 encephalopathy (LATE-NC) – a newly identified form of dementia

According to a study published on April 30, 2019, in *Brain*, a journal of neurology, researchers have linked a protein called TDP-43 to a newly identified form of dementia: **limbic-predominant age-related TDP-43 encephalopathy (LATE-NC)**.

When TDP-43 accumulates in an area in the brain known as the limbic system, it affects learning, memory and emotion, resembling symptoms of Alzheimer's disease, the most common form of dementia. This suggests that people may exhibit symptoms mirroring those of Alzheimer's disease but may not experience the same changes to the brain caused by the disease.

Currently, LATE-NC cannot be diagnosed with standard tests. Because people are typically diagnosed with certain types of dementia based on the symptoms they experience, LATE-NC will not be easily distinguished from Alzheimer's disease due to overlapping symptoms.

Further research is required to improve diagnosis through identifying the different diseases that can lead to dementia, including LATE-NC. Investigators are currently trying to understand how to identify and diagnose LATE-NC clinically.

The discovery of LATE-NC shows the importance of acknowledging the different types of dementia and their complexity. The Alzheimer Society is hopeful that these new findings will pave the way to new treatments that target different forms of dementia.