

Conference Highlights:

Defining the Landscape of Late-Onset Unexplained Epilepsy



A Landmark Conference on Late-Onset Unexplained Epilepsy

In October 2025, we convened the first-ever conference on late-onset unexplained epilepsy, supported in part by grants from the **American Epilepsy Society** and **CURE Epilepsy**. Experts from around the world came together to discuss why some older adults develop epilepsy later in life without a clear cause, and what the potential health implications of this condition are. Discussions centered on how late-onset unexplained epilepsy connects to aging, memory, vascular disease, sleep, brain health, and overall wellness — and how collaboration across fields can lead to better understanding of this condition, and ultimately to better outcomes for patients.

Bringing Diverse Disciplines Together to Expand Understanding

A major goal of the conference was to bring together researchers from different fields to encourage a broader view of late-onset unexplained epilepsy. We invited world-renowned experts from important and related fields outside of epilepsy, including dementia, stroke, sleep, brain imaging, neuropsychology, and more. Insights from dementia and stroke research offer valuable clues for protecting brain health, detecting subtle changes in memory, and developing new therapies to prevent poor outcomes. A key theme throughout the conference was the importance of breaking down barriers between our fields and of sharing critical knowledge and resources to accelerate progress in understanding and treating late-onset unexplained epilepsy.

Protecting Brain Health: Vascular Risk, Sleep, and Lifestyle Factors

While treatments for seizures continue to improve, researchers emphasized that we still do not fully understand why some older adults with epilepsy experience memory decline. Addressing this gap is a major focus of ongoing, multidisciplinary research. Throughout the conference, speakers highlighted the importance of proactively protecting brain health in individuals with late-onset unexplained epilepsy. Maintaining healthy blood pressure, engaging in regular physical and mental activity, and prioritizing high-quality sleep were consistently identified as key factors that may support long-term brain health.

Advances in Biomarkers and Early Detection

We discussed promising work on biomarkers (measurable signs from the body that reflect disease states) that can improve early detection and treatment of cognitive changes and vascular disease. These may come from brain scans, blood tests, recordings of brain activity, sleep patterns, or even voice recordings. By spotting early changes, researchers hope to better understand who may be at higher risk for memory problems and to find ways to monitor brain health alongside seizure control. Over time, this work could lead to more personalized care and earlier steps to protect memory and overall brain health.

The Central Role of Patient Voices and Lived Experience

One of the most impactful moments of the conference came from a woman who shared her personal experience of developing seizures and memory challenges later in life. Her story underscored the critical role of patient voices in shaping research priorities and ensuring that scientific efforts remain grounded in real-world experiences. Large, multi-center studies such as the ELUCID Study are actively partnering with patients to deepen our understanding of late-onset unexplained epilepsy. Attendees agreed that continued engagement and collaboration will be key to answering the field's most pressing questions.

Looking Ahead: Sustaining Momentum and Future Directions

The conference concluded with a shared sense of optimism and purpose, as attendees committed to building on this collaborative momentum and reconvening in two years to share progress and new discoveries. This landmark meeting marked the first time such a broad range of disciplines united around late-onset unexplained epilepsy, a powerful step toward improving brain health and quality of life for older adults living with epilepsy.

