Ultra-early neurological deterioration common in stroke

August 4 2018

(HealthDay)—Ultra-early neurological deterioration (U-END) occurs in
one in eight ambulance-transported patients with acute cerebrovascular disease and is associated with significantly worse outcomes, according to a study published online July 23 in *JAMA Neurology*.

Kristina Shkirkova, from the University of California in Los Angeles, and colleagues performed an exploratory analysis of the prehospital, randomized Field Administration of Stroke Therapy-Magnesium Trial involving 315 ambulances and 60 hospitals receiving stroke patients. The authors assessed neurological deterioration among 1,690 consecutively enrolled patients with suspected acute stroke who were transported by ambulance within two hours of stroke onset.

The researchers found that a final diagnosis of acute cerebral ischemia occurred in 73.2 percent of patients, intracranial hemorrhage in 22.8 percent of patients, and neurovascular mimic in 4 percent of patients. From prehospital to early post-arrival, U-END occurred in 11.8 percent of patients, more often among those with intracranial hemorrhage than those with acute cerebral ischemia (30.8 versus 6.1 percent). U-END patterns include: prehospital U-END without early recovery (3.1 percent), stable prehospital course but early emergency department deterioration (5.1 percent), and continuous deterioration in both prehospital and early emergency department phases (2.8 percent). U-END was associated with worse three-month outcomes.

"Averting U-END may be a target for future prehospital therapeutics," the authors write.

**More information:** [Abstract/Full Text (subscription or payment may be required)]

Copyright © 2018 [HealthDay](https://www.healthday.com). All rights reserved.