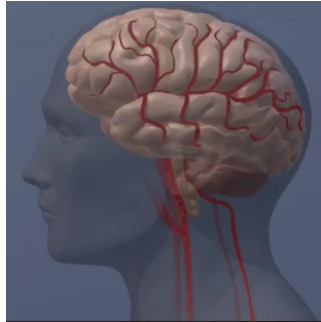


## People Having Stroke Should Get Therapy Within 60 Minutes of Hospital Arrival



People having an ischemic stroke should receive clot-dissolving therapy - if appropriate - within 60 minutes of arriving at the hospital, according to new American Stroke Association guidelines published in the American Heart Association journal *Stroke*.

Ischemic stroke, which accounts for nine in 10 strokes, is caused by a blood clot in the arteries leading to the brain. Calling 9-1-1 immediately after recognizing any of the warning signs of stroke - and getting to a stroke center as fast as possible - are still the most important steps for optimal stroke care.

During an acute stroke, physicians must quickly evaluate and diagnose the patient as soon as possible to determine if patients are eligible to receive the clot-dissolving drug recombinant tissue plasminogen activator (tPA), which must be given 4.5 hours within hours of symptom onset. The goal is to minimize "door to needle" time which provides the patient with the best opportunity for benefit from the treatment.

"tPA can now be considered for a larger group of patients, including some who present up to 4.5 hours from stroke onset," said Edward Jauch, M.D., lead author of the guidelines and director of the Division of Emergency Medicine at the Medical University of South Carolina.

The new guidelines recommend integrating regional networks of comprehensive stroke centers (which offer 24/7, highly specialized treatment for all types of stroke); primary stroke centers (which provide 24/7 specialized care mainly for ischemic stroke); and acute stroke-ready hospitals (which can evaluate and treat most strokes but lack highly specialized capabilities), and community hospitals.

"This is the first time we've brought these healthcare elements together --, including community hospitals which may lack onsite stroke expertise, which reflects the emerging role of telemedicine in these hospitals," Jauch said.

Among other major revisions to the guidelines, if feasible, patients should be rapidly transferred to the closest available certified primary care stroke center or comprehensive stroke center, which might involve air medical transport. "However, for patients brought to hospitals without specialized stroke expertise, telemedicine can provide real-time access to expertise," Jauch said. "If such a hospital partners with a primary or comprehensive stroke center and uses telemedicine, early treatment decisions can be made for patients. If the patient had to be transferred before administering some therapies, it would be too late."

Other key recommendations in the new guidelines include:

- Multidisciplinary quality improvement (QI) committees should be created within hospitals to review and monitor stroke care quality. "We now have dozens of studies showing the benefit of QI programs," Jauch said.
- Recently introduced stent retrievers could potentially remove large blood clots more completely and quickly than tPA. But the devices shouldn't be a substitute for intravenous tPA and should only be used in clinical studies to determine if they improve patient outcomes.

F.A.S.T. is an easy way to remember the sudden signs of a stroke:

- Face drooping: Does one side of the face droop or is it numb?
- Arm weakness: Is one arm weak or numb?
- Speech difficulty: Is speech slurred, are you unable to speak, or are you hard to understand?
- Time to call 9-1-1: If you have any of these symptoms, even if the symptoms go away, call 9-1-1 and get to the hospital immediately.

Co-authors of the guidelines are: Jeffrey L. Saver, M.D.; Harold P. Adams Jr., M.D.; Askiel Bruno, M.D., M.S.; J. J. (Buddy) Connors, M.D.; Bart M. Demaerschalk, M.D., M.Sc.; Pooja Khatri, M.D.; Paul W. McMullan Jr., M.D.; Adnan I. Qureshi, M.D.; Kenneth Rosenfield, M.D.; Phillip A. Scott, M.D.; Debbie Summers, R.N., M.S.N.; David Z. Wang, D.O.; Max Wintermark, M.D.; and Howard Yonas, M.D.

