Ambulance-Based Thrombolysis in Acute Ischemic Stroke 1622
Early thrombolysis with intravenous tissue plasminogen activator is associated with better outcomes in acute ischemic stroke. In a study randomized by week from May 1, 2011, to January 31, 2013, that involved 6182 German adults with suspected stroke, Ebinger and colleagues found that compared with conventional ambulance care, use of an ambulance equipped with a computed tomography scanner, laboratory capability, telemedicine connection, and trained stroke team resulted in decreased time to treatment without an increase in adverse events. In an Editorial, Grotta discusses progress in treatment of ischemic stroke.

Time to tPA Administration and Outcomes of Ischemic Stroke 1632
In an analysis of registry data from 1030 hospitals (71 169 patients) participating in Target: Stroke, a national acute ischemic stroke care quality improvement program, Fonarow and colleagues assessed door-to-needle times for tissue plasminogen activator (tPA) administration and patient outcomes before and after program initiation. The authors report the Target:Stroke initiative was associated with improved timeliness of tPA administration and lower in-hospital mortality and intracranial hemorrhage.

Effect of Acetazolamide on Vision Function in IIH 1641
Acetazolamide is commonly used to treat idiopathic intracranial hypertension (IIH) despite insufficient evidence supporting its use. In a randomized study that enrolled 165 patients with IIH and mild vision loss, Wall and colleagues found that 6 months’ treatment with acetazolamide and a low-sodium weight reduction diet, compared with diet alone, resulted in modest improvement in visual field function. In an Editorial, Horton discusses beneficial effects of acetazolamide in IIH.

Lorazepam vs Diazepam for Pediatric Status Epilepticus 1652
Diazepam is approved for the treatment of status epilepticus in children. However, some data suggest lorazepam may be more effective or safer. In a randomized trial involving 273 patients aged 3 months to 18 years who presented to academic pediatric emergency departments with convulsive status epilepticus, Chamberlain and colleagues found that treatment with lorazepam did not result in improved efficacy or safety compared with diazepam.
Research (continued)

Conservative vs Interventional Treatment of Unruptured bAVMs 1661
Whether conservative management is superior to interventional treatment for unruptured brain arteriovenous malformations (bAVM) is not clear. In a prospective cohort study of 204 adults diagnosed with unruptured bAVM and treated with intervention (endovascular embolization, neurosurgical excision, stereotactic radiosurgery) or conservatively (without intervention), Al-Shahi Salman and colleagues found that conservative management was associated with better clinical outcomes through 4 years’ follow-up.

Clinical Review & Education

Pharmacological Treatment of Parkinson Disease 1670
Parkinson disease is incurable; however, symptomatic therapies can improve patients’ quality of life. In an evidence-based review, Connolly and Lang discuss initial pharmacological treatment of classic motor symptoms; management of medication-related motor complications and other adverse effects; and treatment of selected nonmotor symptoms including depression, cognitive impairment, orthostatic hypotension, and salivary.

Serum BDNF and Risk of Dementia 1684
A recent article in JAMA Neurology reported an association between higher serum brain-derived neurotropic factor (BDNF) levels and reduced risk of incident dementia. In this From the JAMA Network article, Aisen discusses investigation of BDNF and other biomarkers that may have utility in diagnosis, monitoring, and potential treatment of Alzheimer disease and other dementias.

Medical Letter: Deep Brain Stimulation for Parkinson Disease 1686
Deep brain stimulation is an approved treatment for patients with Parkinson disease and severe levodopa-associated motor complications. This Medical Letter article briefly explains the procedure, summarizes adverse effects, and highlights recent data on efficacy—including for patients with early motor complications.