

2018 AHA/ASA stroke guidelines & radiology

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The following are key points to remember from the American Heart Association (AHA)/ American Stroke Association (ASA) 2018 Guidelines for the early management of patients with acute ischemic stroke:

- These 2018 guidelines are an update to the 2013 guidelines, which were published prior to the six positive “early window” mechanical thrombectomy trials that emerged in 2015 and 2016 showed a clear benefit of “extended window” mechanical thrombectomy for certain patients with large vessel occlusion who could be treated out to 16-24 hours.
- IV tPA should be administered to all eligible acute stroke patients within 3 hours of last known normal and to a more selective group of eligible acute stroke patients (based on ECASS III exclusion criteria) within 4.5 hours of last known normal. Centers should attempt to achieve door-to-needle times of <60 minutes of patients span stroke tpa. treated with>
- Prior to initiation of IV tPA in most patients, a noncontrast head computed tomography (CT) and glucose are the only required tests.
- Centers should attempt to obtain a noncontrast head CT within 20 minutes of arrival in ≥50% of stroke patients who may be candidates for IV tPA or mechanical thrombectomy
- For patients who may be candidates for mechanical thrombectomy, an urgent CT angiogram or magnetic resonance (MR) angiogram (to look for large vessel occlusion) is recommended, but this study should not delay treatment with IV tPA if indicated.
- Patients ≥18 years should undergo mechanical thrombectomy with a stent retriever if they have minimal prestroke disability, have a causative occlusion of the internal carotid artery or proximal middle cerebral artery, have a National Institutes of Health stroke scale score of ≥6, have a reassuring noncontrast head CT (ASPECT score of ≥6), and if they can be treated within 6 hours of last known normal. No perfusion imaging (CT-P or MR-P) is required in these patients.
- In selected acute stroke patients within 6-24 hours of last known normal who have evidence of a large vessel occlusion in the anterior circulation obtaining perfusion imaging (CT-P or MR-P) or an MRI with diffusion-weighted imaging (DWI) sequence is recommended to help determine whether the patient is a candidate for mechanical thrombectomy.