2018 AHA/ASA Stroke Early Management Guidelines

- DAWN & DEFUSE3 Trials

- Clear benefit of "extended window" mechanical thrombectomy for certain patients with large vessel occlusion who could be treated out to 16-24 hours.

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- IV tPA
  - Administered to all eligible acute stroke patients within 3 hours of last known normal
  - More selective group of eligible acute stroke patients within 4.5 hours of last known normal.
- 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.
- Candidates for mechanical thrombectomy, an urgent CT angiogram or magnetic resonance (MR) angiogram (to look for large vessel occlusion) is recommended,
- This study should not delay treatment with IV tPA if indicated.

2018 AHA/ASA Stroke Early Management Guidelines

- Patients ≥18 years should undergo mechanical thrombectomy with a stent retriever if
  - Minimal prestroke disability,
  - Causative occlusion of the internal carotid artery or proximal middle cerebral artery,
  - Have a NIH stroke scale score of ≥6
  - Reassuring noncontrast head CT (ASPECT score of ≥6),
  - And 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
- And would have been eligible for DAWN or DEFUSE 3
- CT perfusion imaging (CT-P or MR-P) or diffusion-weighted imaging (DWI) is recommended to help determine whether the patient is a candidate for mechanical thrombectomy

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- selected acute stroke patients within 6-16 hours of last known normal who have a large vessel occlusion in the anterior circulation and meet other DAWN or DEFUSE 3 eligibility criteria, mechanical thrombectomy is *recommended*.
- In selected acute stroke patients within 6-24 hours of last known normal who have large vessel occlusion in the anterior circulation and meet other DAWN eligibility criteria, mechanical thrombectomy with a stent retriever is *reasonable*.
- Administration of aspirin is recommended in acute stroke patients within 24-48 hours after stroke onset. For patients treated with IV tPA, aspirin administration is generally delayed for 24 hours. Urgent anticoagulation (e.g., heparin drip) for most stroke patients is not indicated.

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- It remains unknown whether it would be beneficial for emergency medical services to bypass a closer IV tPA-capable hospital for a thrombectomy-capable hospital.
- While such an approach may delay IV tPA administration for patients who are and who are not mechanical thrombectomy candidates, this approach would expedite thrombectomy for those who are mechanical thrombectomy candidates