DAWN trial

Mechanical thrombectomy is recommended for selected patients 6–16 hours from onset with large vessel occlusion (LVO) in the anterior circulation who meet other DAWN trial or DEFUSE-3 eligibility criteria (Level I [1]).

Mechanical thrombectomy is reasonable in selected patients 16–24 hours from onset with anterior circulation LVO who meet other DAWN eligibility criteria (Level II [2]).

It is unknown whether the benefit of thrombectomy in late presenting acute stroke patients with imaging evidence of clinical-infarct mismatch is different in patients presenting with wake-up stroke compared with those presenting with witnessed onset or unwitnessed onset. Methods- Prespecified secondary analysis was performed from DAWN (Diffusion Weighted Imaging [DWI] or Computerized Tomography Perfusion [CTP] Assessment With Clinical Mismatch in the Triage of Wake Up and Late Presenting Strokes Undergoing Neurointervention), a multicenter, prospective, randomized clinical trial with blinded end point assessment comparing thrombectomy with the Trevo device against standard medical therapy in patients with acute stroke and clinical-infarct mismatch presenting 6 to 24 hour after the time last seen well. For the purposes of this study, the primary outcome was the proportion of modified Rankin Scale score 0 to 2 at 90 days. Univariable analysis and multivariable logistic regression was used to assess the relationship between outcome and mode of onset. Results- All 206 enrolled patients were included in the study. Mode of onset was: wake-up stroke (55.3%, n=114), witnessed onset (12.1%, n=25), and unwitnessed onset (32.5%, n=67) with median time last seen well to randomization (13.4±3.7, 10.0±3.7, 14.1±4.9 hours) respectively. Rates of 90-day modified Rankin Scale score of 0 to 2 and symptomatic intracerebral hemorrhage in the thrombectomy arm were not statistically different across patient onset subtypes (P=0.79 and P=0.40, respectively). The benefit of thrombectomy compared with best medical therapy was maintained across all 3 onset modes (rates of 90-day modified Rankin Scale score of 0 to 2 in patients allocated to thrombectomy versus control: wake-up stroke-49.3% versus 10.6%, witnessed onset-63.6% versus 21.4%, UW-41.4% versus 13.2%; P×interaction=0.79). In univariable and multivariable analyses, mode of onset was not identified as a significant predictor of modified Rankin Scale score 0 to 2 at 90 days. Conclusions- In patients with acute ischemic stroke presenting between 6 and 24 hours from time last seen well and harboring clinical-infarct mismatch, the benefit of thrombectomy was similar regardless of the wake-up, unwitnessed, or witnessed mode of onset [3].

Nogueira RG, Jadhav AP, Haussen DC, Bonafe A, Budzik RF, Bhuva P, Yavagal DR, Ribo M, Cognard C, Hanel RA, Sila CA, Hassan AE, Millan M, Levy EI, Mitchell P, Chen M, English JD, Shah QA, Silver FL, Pereira VM, Mehta BP, Baxter BW, Abraham MG, Cardona P, Veznedaroglu E, Hellinger FR, Feng L, Kirmani JF, Lopes DK, Jankowitz BT, Frankel MR, Costalat V, Vora NA, Yoo AJ, Malik AM, Furlan AJ, Rubiera M, Aghaebrahim A, Olivot JM, Tekle WG, Shields R, Graves T, Lewis RJ, Smith WS, Liebeskind DS, Saver JL, Jovin TG; DAWN Trial Investigators. Thrombectomy 6 to 24 Hours after Stroke with a Mismatch between Deficit and Infarct. N Engl J Med. 2018 Jan 4;378(1):11-21. doi: 10.1056/NEJMoa1706442. Epub 2017 Nov 11. PubMed PMID: 29129157.

[1], [2]
Powers WJ, Rabinstein AA, Ackerson T, et al. 2018 Guidelines for the Early Management of Patients With Acute Ischemic Stroke: A Guideline for Healthcare Professionals From the American Heart Association/American Stroke Association. Stroke. 2018; 49:e46–e110

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Jadhav AP, Aghaebrahim A, Jankowitz BT, Haussen DC, Budzik RF, Bonafe A, Bhuva P, Yavagal DR, Hanel RA, Hassan AE, Ribo M, Cognard C, Sila CA, Zhang Y, Smith WS, Saver JL, Liebeskind DS, Nogueira RG, Jovin TG. Benefit of Endovascular Thrombectomy by Mode of Onset: Secondary Analysis of the DAWN Trial. Stroke. 2019 Oct 1:STROKEAHA119025795. doi: 10.1161/STROKEAHA.119.025795. [Epub ahead of print] PubMed PMID: 31570085.

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