Thrombolysis in cerebral infarction (TICI) scale

The thrombolysis in cerebral infarction (TICI) grading system was described in 2003 by Higashida et al. ¹⁾ as a tool for determining the response of thrombolytic therapy for ischemic stroke. In neuro-interventional radiology it is commonly used for patients post endovascular revascularization. Like most therapy response grading systems, it predicts prognosis.

Classification

The original description ²⁾ was based on the angiographic appearances of the treated occluded vessel and the distal branches:

Grade 0: no perfusion

Grade 1: penetration with minimal perfusion

Grade 2: partial perfusion

Grade 2A: only partial filling (less than two-thirds) of the entire vascular territory is visualized

Grade 2B: complete filling of all of the expected vascular territory is visualized but the filling is slower than normal

Grade 3: complete perfusion

In 2013 Fugate et al. reported marked variability in its definitions and application 3) 4)

A consensus paper from three collaborative groups published in Stroke in 2013 ⁵⁾ recommended a modified scale, and a change of name from Thrombolysis in Cerebral Infarction to modified Treatment in Cerebral Infarction (mTICI), to better reflect the increased use of endovascular therapies.

References

1) 2)

Higashida RT, Furlan AJ, Roberts H et-al. Trial design and reporting standards for intra-arterial cerebral thrombolysis for acute ischemic stroke. Stroke. 2003;34 (8): e109-37.

doi:10.1161/01.STR.0000082721.62796.09

Fugate JE, Klunder AM, Kallmes DF. What is meant by "TICI"?. AJNR Am J Neuroradiol. 2013;34 (9): 1792-7. doi:10.3174/ajnr.A3496

4) 5)

Zaidat OO, Yoo AJ, Khatri P et-al. Recommendations on angiographic revascularization grading standards for acute ischemic stroke: a consensus statement. Stroke. 2013;44 (9): 2650-63. doi:10.1161/STROKEAHA.113.001972

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