TRANSIENT ISCHAEMIC ATTACK (TIA)
Supporting information

This guideline has been prepared with reference to the following:

Royal College of Physicians. Stroke: National clinical guideline For Stroke. 2023. London, RCP

https://www.strokeguideline.org/

NICE. Stroke and transient ischaemic attack in over 16s: diagnosis and initial management. 2022. London. NICE

https://www.nice.org.uk/guidance/ng128

The ABCD^2 score is the most accurate predictor of stroke risk within 1 week of TIA?
The ABCD^2 score was derived from a validation study in 1916 patients (Johnston, 2007) that compared the original ABCD with the California system. While the latter was developed to predict stroke within 90 days and the former within 7 days, the new unified score was better at predicting the 2-day risk, considered to be the most relevant for informing decisions about evaluation, observation and treatment (c statistics 0.62-0.83).
A 2015 meta-analysis of 29 nonrandomised studies found that a ABCD^2 score of ≥4 was sensitive (86.7%, 95% confidence interval [CI] 81.4%–90.7%) but not specific (35.4%, 95% CI 33.3%–37.6%) for recurrent stroke within 1 week of TIA (Wardlaw et al). The authors concluded that this demonstrated that the ABCD^2 score does not reliably discriminate those at low and high risk of early recurrent stroke.
A meta-analysis of 44 eligible studies -of which, data was available for 33 (Sanders 2012) concluded that the ABCD^2 score leads to only small revisions of baseline stroke risk particularly in settings of very low baseline risk and when used by non-specialists.

Johnston SC, Rothwell PM, Nguyen-Huynh MN, et al. Validation and refinement of scores to predict very early stroke risk after transient ischaemic attack. Lancet 2007;369:283-92

Sanders LM, Srikanth VK, Blacker DJ et al. Performance of the ABCD^2 score for stroke risk post TIA: Meta-analysis and probability modelling. Neurology 2012; 79:971-980.

Wardlaw JM, Brazzelli M, Chappell FM et al. ABCD^2 score and secondary stroke prevention: meta-analysis and effect per 1,000 patients triaged. Neurology. 2015;85:373-80
http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4520819/

Evidence Level: I

Is there any evidence that anticoagulants help to prevent recurrence?
A Cochrane systematic review of 11 trials with a total of 2487 participants (Sandercock, 2009) found no evidence of an effect of anticoagulant therapy on either the odds of death or dependency (two trials, OR 0.83, 95% CI 0.52 to 1.34) or of 'non-fatal stroke, myocardial infarction, or vascular death' (four trials, OR 0.96, 95% CI 0.68 to 1.37). Death from any cause (OR 0.95, 95% CI 0.73 to 1.24) and death from vascular causes (OR 0.86, 95% CI 0.66 to 1.13) were not significantly different between treatment and control. The inclusion of two recently completed trials did not alter these conclusions. There was no evidence of an effect of anticoagulant therapy on the risk of recurrent ischaemic stroke (OR 0.85, 95% CI 0.66 to 1.09). However, anticoagulants increased fatal intracranial haemorrhage (OR 2.54, 95% CI 1.19 to 5.45), and major extracranial haemorrhage (OR 3.43, 95% CI 1.94 to 6.08). This is equivalent to anticoagulant therapy causing about 11 additional fatal intracranial haemorrhages and 25 additional major extracranial haemorrhages per year for every 1000 patients given anticoagulant therapy.

Sandercock PA, Gibson LM, Liu M. Anticoagulants for preventing recurrence following presumed non-cardioembolic ischaemic stroke or transient ischaemic attack. Cochrane Database Syst Rev. 2009, Issue 2. Art. No.: CD000248
http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD000248.pub2/full

Evidence Level: III

Last amended May 2024

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Last reviewed March 2025