



ABCD rule predicts 7-day stroke risk in transient ischemic attack

Rothwell PM, Giles MF, Flossmann E, et al. A simple score (ABCD) to identify individuals at high early risk of stroke after transient ischaemic attack. *Lancet* 2005; 366:29–36.

WHAT NEW RESEARCH MEANS FOR YOUR PRACTICE

■ WHAT THE STUDY ASKED

Can clinical factors be used in patients with transient ischemic attacks (TIAs) to predict subsequent stroke?

■ WHAT THE STUDY FOUND

Easy-to-assess clinical and demographic variables can be used to predict which patients with TIAs are at greatest risk of stroke in the subsequent week.

Level of evidence

1b– (clinical decision rule). The level-of-evidence scale runs from 1 (strongest) to 5 (weakest); see www.infopeoms.com/levels.html.

■ SYNOPSIS OF THE STUDY

These authors studied more than 100,000 patients registered with 50 British family physicians. Between 1981 and 1986, all patients with a possible first TIA were referred to a study neurologist as soon after the event as possible. The neurologist agreed with the initial diagnosis approximately half the time. A study nurse reevaluated these patients 1 month after the initial evaluation by a neurologist.

Among 209 patients with a first TIA, 18 had a stroke within 1 week. These patients were used to develop a predictive model that

the authors then tested prospectively on another group of 190 patients with TIAs. This validation group came from more than 90,000 patients registered with 63 British family physicians and were evaluated in a manner similar to that used for the first group. Twenty of these patients had a stroke in the 7 days after TIA.

Finally, the authors also tested how well the predictive model worked when used by non-neurologists on a less rigorously studied group of patients with TIAs.

Study results

In the predictive model, called ABCD (for age, blood pressure, clinical factors, and duration), patients are given points as follows:

- 60 years or older (1 point)
- Systolic blood pressure greater than 140 mm Hg and/or diastolic blood pressure greater than or equal to 90 mm Hg (1 point)
- Unilateral weakness (2 points)
- Speech disturbance without weakness (1 point)
- Duration of symptoms of 60 minutes or more (2 points), 10 minutes to 59 minutes (1 point), less than 10 minutes (0 points).

In the validation group, 19 of the 20 patients who later had a stroke had a score of 5 or more. In the group assessed by non-neurologists, no patient with a score lower than 4 had a stroke.

19 of the 20 patients who later had strokes had a score of 5 or more