J R Coll Physicians Edinb 2008; 38:133

The management of transient ischaemic attacks

RM Bracewell
Senior Lecturer in Neurology, University of Wales, Bangor, UK

TITLE Effect of urgent treatment of transient ischaemic attack and minor stroke on early recurrent stroke (EXPRESS study): a prospective population-based sequential comparison

AUTHORS Rothwell PM, Giles MF, Chandratheva A et al.

JOURNAL *Lancet* 2007; 370:1432–42.

DECLARATION OF INTERESTS No conflict of interests declared.

***Published online** May 2008*

***Correspondence to** RM Bracewell, Wolfson Centre for Clinical and Cognitive Neuroscience, University of Wales, Bangor LL57 2AS, UK*

tel. ***+44 (0)1248 382 628***
e-mail ***m.bracewell@bangor.ac.uk***

SUMMARY

This prospective, sequential trial is part of the Oxford Vascular Study. The study population consists of 91,000 patients registered with 63 general medical practioners in Oxfordshire.[1,2] During phase one (1 April 2002–30 September 2004), GPs referred, by fax, patients with transient ischaemic attacks (TIA), or minor stroke not felt to merit admission, to a dedicated clinic open Mondays to Fridays. Patients were assessed at a median of three days from referral (which would be extraordinarily prompt in most of the UK). GPs were faxed (typically within a day) treatment recommendations. Patients were asked to see their GPs as quickly as possible. Treatment began with a median delay of 20 days. Treatments were aspirin and/or clopidogrel, simvastatin, anti-hypertensives (unless the systolic blood pressure was below 130 mmHg), and anticoagulation if required. Brain imaging was obtained before starting combination antiplatelet treatment or anticoagulation after a minor stroke. The 90-day risk of recurrent stroke was 10.3%.

During phase two (1 October 2004–31 March 2007), GPs sent patients directly (no referral) to the clinic, which ran every weekday afternoon. Median referral time was less than 24 hours. Assessment was very similar to phase one, as were treatments. However, when prescribed, aspirin treatment was initiated in clinic with a loading dose of 300 mg. When initiated, a 300-mg loading dose of clopidogrel was also prescribed. Patients were given in-clinic prescriptions for their medications (rather than having to see their GPs and collect them then). Thus median time to treatment fell from 20 days to 1 day. A report was faxed to the GP, usually within 24 hours. The 90-day recurrent stroke risk was 2.1%.

OPINION

This paper, previously brought to readers' attention as a Medibyte,[3] ought to provide the impetus to revolutionise how services for patients with neurovascular disease are provided. As a senior house physician at a hospital attached to an ancient university only a decade ago, I found myself in the unusual position of trying to persuade colleagues in general practice to send patients in if they had a suspected stroke (rather than my more usual desperate and futile attempts to limit the size of the medical take). There is an ever-growing body of evidence that victims of stroke should be admitted to and cared for in dedicated stroke units. That particular battle has been won (or rather the tide has turned).[4,5]

However, what of patients with 'minor' strokes or TIAs? We are all used to reading trials requiring hundreds or thousands of patients to demonstrate limited treatment effects. Some are sceptical about the value of adding (typically) expensive new drugs or interventions to the treatments of many conditions. What Rothwell and colleagues show is that their intervention reduces the 90-day risk of recurrent stroke by about 80%. If their intervention had been a new drug or surgical procedure, it would have made headline news as a miracle cure. However, Rothwell's miracle cure is merely timely outpatient review and prompt initiation of (what should be) standard drug treatment. Similar results are seen in the SOS-TIA study from Paris (although this study has no comparison group).[6] We don't need 24-hour-a-day access to fancy scanners, thrombolysis or compliant neurovascular interventionalists – although all these would be welcome – to achieve these therapeutic gains. We do, however, need education of the public, primary- and secondary-care physicians, medical managers and politicians, as well as resources, organisation and the will to do something about this major health problem.

REFERENCES

1 Rothwell PM, Coull AJ, Silver LE et al. Population-based study of event-rate, incidence, case fatality and mortality for all acute vascular events in all arterial territories (Oxford Vascular Study). *Lancet* 2005; 366:1773–83.
2 Rothwell PM, Coull A, Giles MF, et al. Change in stroke incidence, mortality, case-fatality, severity, and risk factors in Oxfordshire, UK, from 1981 to 2004 (Oxford Vascular Study). *Lancet* 2004; 363:1925–33.
3 Finlayson N. Move quickly on TIAs and small strokes. *J R Coll Physicians Edinb* 2007; 37:330.
4 Royal College of Physicians Intercollegiate Stroke Working Party. *National clinical guidelines for stroke*. 2nd ed. London: Royal College of Physicians; 2004.
5 National Audit Office. *Reducing brain damage: faster access to better stroke care*. London: Department of Health Publication; 2004.
6 Lavallée PC, Meseguer E, Abboud H et al. A transient ischaemic attack clinic with round-the-clock access (SOS-TIA): feasibility and effects. *Lancet Neurol* 2007; 6(11):953–60.