depression (Simon et al., 2004). The main reason for this disparity is the lack of resources in poor countries. We therefore propose that a type of brain stimulation – transcranial direct current stimulation (tDCS) – may be a satisfactory alternative to increase access to adequate antidepressant treatment.

Electroconvulsive therapy (ECT) and transcranial magnetic stimulation (TMS) are examples of brain stimulation therapy that are effective in treating depression. However, these treatments are expensive and might be associated with adverse effects (Hasey, 2001). In recent years, a simple technique of brain stimulation that seemed long forgotten has received renewed attention – tDCS. This treatment is inexpensive, easy to administer, non-invasive and painless (Nitsche et al., 2003). There are few past reports of tDCS in treating depression (Lolas, 1977). However, at the time of those trials much less was known about the methodological aspects and physiological effects of tDCS and the results were quite variable.

Preliminary, unpublished data from a randomised, sham-stimulation controlled and double-blind trial evaluating the effects of anodal stimulation of the left dorso-lateral prefrontal cortex in people with depression suggest that tDCS is an effective treatment for major depression (further details available from the authors on request).

Thus, we have come to believe that tDCS might be a reasonable alternative treatment for depression in low- and middle-income countries. The device to deliver tDCS is simple, can cost less than US$100.00 and can be manufactured locally. The equipment is fully reusable and utilises one standard battery that can last several weeks. Furthermore, this treatment is easy to administer, and can be applied by technicians following appropriate instruction and training. Although further studies evaluating this method are warranted, tDCS might help to improve mental health in areas with poor resources.


F. Fregni Harvard Center for Non-Invasive Brain Stimulation, Beth Israel Deaconess Medical Center, Harvard Medical School, 330 Brookline Avenue, Boston, MA 02215, USA.
E-mail: fregni@hsph.harvard.edu
P. S. Boggio Psychiatry Department, University of São Paulo, São Paulo, Brazil
M. Nitsche Department of Clinical Neurophysiology, George-August-University, Gottingen, Germany
A. Pascual-Leone Harvard Center for Non-Invasive Brain Stimulation, Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, USA

NICE recommendations for valproate treatment are unhelpful

The National Institute for Clinical Excellence (NICE) guidelines for treatment of mania recommend that consideration be given to olanzapine and semi-sodium valproate as first-line treatments (NICE, 2003). They state that valproate can rarely cause severe liver damage and assert that liver function should be assessed before and during therapy, saying ‘tests that reflect protein synthesis, particularly prothrombin time are most relevant’. They continue: ‘Blood tests (blood cell count, including platelet count, bleeding time and coagulation tests) are therefore recommended’. Most readers will be familiar with the concept of the bleeding time only through the immortal lines delivered by James Robertson Justice in the film Doctor in the House (1954). It is a rarely indicated test of platelet function which requires making a 3 cm cut on a patient’s forearm and timing how long it takes for the bleeding to stop. Clearly such a test would not be acceptable to a substantial proportion of patients with mania.

The recommendation seems a non sequitur. Saying that valproate can cause liver damage and that ‘therefore’ these investigations should be performed does not make sense because, with the exception of the coagulation tests, they are not indicators of hepatic function. In fact, the investigations are not recommended by the British National Formulary (BNF) but in the summary product characteristics for semi-sodium valproate (available at http://emc.medicines.org.uk). It is here that it is stated that valproate can cause the frequent occurrence of thrombocytopenia, and it is here that the investigations listed are recommended.

It would strain credulity to believe that British doctors routinely measure bleeding time prior to initiating valproate therapy. Yet if a patient were to suffer ill effects, then having ignored recommendations found both in the summary product characteristics and in NICE guidelines could make an action for negligence difficult to defend.

Even setting aside the bleeding time, the advice to perform more straightforward investigations remains problematic. Faced with a manic patient, one is unlikely to feel enthusiastic about holding off treatment until a prothrombin time has been obtained. Instead, one will be tempted to choose an alternative treatment which can be started immediately, such as haloperidol. The BNF does not recommend that these blood tests be performed before starting valproate and there is no evidence base to show that carrying them out pre-treatment will produce a better outcome. The advice seems to have been included in the NICE guidelines in a thoughtless way, without regard to the possibility that unnecessary investigations will make a particular treatment option less acceptable to both doctors and patients. If recommendations about treatment are to be evidence-based, then so must be the recommendations about accompanying investigations.


D. Curtis, M. Kerr East London and City Mental Health Trust, Department of Adult Psychiatry, Royal London Hospital, Whitechapel, London E1 1BB, UK.
E-mail: david.curtis@nrl.ac.uk

Combating editorial racism

Peter Tyrer (2005) has set out a number of ways by which the British Journal of Psychiatry will attempt to minimise editorial racism and he acknowledges that this is only the beginning of a long journey. Nevertheless, he ought to be congratulated for his vision. His proposal to increase the number of corresponding editors from low- and middle-income countries is commendable, although I would like to see an