Editorial for ECT

Chris Freeman, MD

In April 2003, the National Institute for Clinical Excellence (NICE) published its guidance on electroconvulsive therapy (ECT) (report number 59). For those of us involved in work with ECT in the United Kingdom, it produced a mixture of disappointment, relief, and frustration in roughly equal measures. Relief because there were rumors that NICE might "ban" ECT, frustration because of the nature of the NICE Guidance process, and disappointment because of the limited endorsement that NICE gave to ECT.

NICE is a wholly government-funded body set up to provide guidance in England and Wales (not Scotland where I work) on all aspects of evidence-based practice in medicine. NICE produces 3 types of guidance. Clinical guidelines are comprehensive reports often running to several hundred pages based on detailed and systematic reviews and compiled by an expert panel of clinical and research leaders in a particular field along with patients and carers. NICE has produced excellent guidance on depression, posttraumatic stress disorder, eating disorders, and obsessive compulsive disorder and has several other major psychiatric topics in the pipeline (www.nice.org.uk). All reports can be downloaded from their Web site. The second type of guidance is health technology reports. These are on a narrower topic such as drugs, medical devices, diagnostic techniques, or particular surgical procedures. In psychiatry, there have been health technology appraisals on atypical antipsychotics (number 43), the use of the drugs orlistat and sibutramine in the treatment of obesity (numbers 22 and 31), new drugs in the treatment of bipolar disorder (number 66), and computerized cognitive behavior therapy in the treatment of depression and anxiety (number 51). The ECT report which is the subject of this editorial is number 59, its full title, "The clinical effectiveness and cost-effectiveness of ECT for depressive illness, schizophrenia, catatonia, and mania." The third type of guidance covers public health issues.

What is most surprising about the ECT appraisal is that no psychiatrist was on the committee; in fact, no mental health professional was part of the group. The group was chaired by a professor of clinical pharmacology. Among its 24 members were 2 general practitioners, 3 professors of pharmacology, 3 consultant physicians, a surgeon, and 2 hospital chief executives. There was no one closely connected with mental health. Unlike the clinical guideline program where a group of specialists is assembled for a particular report, the Health Technology Appraisal Committee is a standing committee with members serving for 3 years and reviewing a wide range of health technologies. The group did, of course, take evidence from clinicians and patient groups, and it is clear that they received very robust evidence from patients and ex-patients about the dangers and harmful effects of ECT.

NICE did endorse the use of ECT but only in a limited way and as a treatment of last resort. Their key conclusions were as follows:

1. ECT should only be used for treatment of severe depressive illness, a prolonged or severe episode of mania, or catatonia.
2. ECT should only be used in the above disorder if the conditions below apply.
3. ECT should be used to gain fast and short-term improvement of the severe symptoms after all other treatment options have failed, or when the situation is thought to be life-threatening.
4. The treatment should be stopped as soon as the person has responded, if there are any adverse effects, or if they withdraw their consent.
5. ECT should not be used as a long-term treatment to prevent recurrence of depressive illness.
6. ECT should not be used in the general management of schizophrenia.

NICE made many other sensible recommendations pointing out the need for informed consent, a documented risk benefit assessment for each individual who was being considered for ECT, and great emphasis on memory and cognitive testing during and at the end of treatment courses.

Thus, as of the middle of 2003, psychiatrists in England and Wales, but not in Scotland, were left with the possibility that they could only use ECT as a treatment of last resort, not use maintenance or continuation ECT, and not use ECT for the treatment of schizophrenia. The Royal College of Psychiatrists special committee on ECT quickly issued some guidance about what to do and what to say to patients and their families if treating patients outwith NICE Guidance and decided to appeal. Appeals against NICE Guidance can be in a number of forms, but the one that most fitted our case was that the guidance was "perverse."

This implies that the committee has incorrectly or inappropriately interpreted the evidence base in producing their guideline.

We appealed on the following points:

1. ECT should not be reserved for only severe depression.
2. ECT should not be a treatment of last resort after all other treatments have failed.
3. The restrictions on continuation/maintenance ECT.

We pointed out that the evidence base for ECT was not from the most severe cases. All the randomized controlled trials excluded the most severe patients because they could not give consent, might have been detained under the Mental Health Act, or had marked suicidal ideation. Our case was that the evidence base for ECT was from trials from moderately depressed patients. We pointed out that NICE and the Department of Health were committed to the principle of patient choice and that, surely, a patient should be able to choose to have ECT. If a patient had moderately severe depression, had responded well to ECT in the past, and had capacity to make a decision about his treatment, why could he not opt for ECT rather than wait knowing that other treatment interventions might fail. We pointed out that although there were no randomized controlled trials of the use of continuation and maintenance ECT, the clinical evidence of its effectiveness was strong, and we described cases that could only be kept well by maintenance ECT and not by best available drug treatment. At the oral hearing, a patient representative and her husband accompanied us. She gave an eloquent personal testimony about the effectiveness of ECT, how it had been lifesaving for her, how she did not think that she would be alive if it was not for ECT, how other treatments had failed, and how the side effects had not been too troublesome. The appeals procedure was well run, courteous, and considered, but we lost on all grounds, and the original guidance was published.

WHAT HAS THE IMPACT OF NICE GUIDANCE BEEN?

There was a flurry of concern and many inquiries to the Royal College's special committee on ECT during the second half of 2003 but little anxiety or concern since. The changes described below with the development of SEAN (Scottish ECT Accreditation Network) and ECTAS (ECT Accreditation Service for England, Wales, and the Republic of Ireland) were already planned or under way and would have happened with or without the NICE Guidance. Maintenance ECT continues to be used in carefully selected cases. One key point that we, as clinicians, failed to appreciate until very late in the day was that we were talking a somewhat different language to NICE. When psychiatrists think of severe depression, their threshold is markedly higher than the judgement made by nonpsychiatrists. This became clear when NICE published its excellent clinical guideline on the wider treatment of depressive disorders. The clear implication from this is that most patients referred into secondary care would be classified as having severe depression.

The articles in this issue cover 4 important areas: the cost-effectiveness of ECT, the use of continuation and maintenance ECT, health-related quality of life, and the use of ECT for the treatment-resistant schizophrenia. They certainly considerably add to the body of evidence that NICE will need to consider in its next guidance. It is clear that, in other clinical areas, NICE is quite prepared to make recommendations which are not based on large, randomized, controlled trials or meta analysis. For example, in the recently published clinical guidance on eating disorders, there were virtually no category A recommendations (recommendations based on 1 or more RCT). Health technology appraisals do not use the same grading of their recommendations into A, B, and C, but I do not think that this explains the very cautious recommendations that NICE made. It is clear that they were impressed by the evidence they received on the damage and harm that ECT can do, and while they accepted that ECT had benefits, they concluded that the likelihood of benefit had to be very high to outweigh the risks, hence their recommendations on quite restricted use. It is to be hoped that the articles on quality of life and cost-effectiveness in this issue will help redress that balance.

WHERE DO WE GO NOW?

Over the last 20 years, the rate of use of ECT in the United Kingdom has steadily fallen. If the slope does not level out and if the last collected figures (2003) are projected forward, the rate will reach zero in 2012. This contrasts with the situation in North America where the rates of use of ECT have been rising. It raises the concern that ECT may be being underused in the United Kingdom, causing patients with severe and chronic depression to suffer much longer than they need as antidepressant after antidepressant is changed. This conclusion is also reached by an article from Germany looking at adherence to treatment pathways to inpatients with depression.[1] The United Kingdom now has the most carefully inspected and accredited ECT service anywhere in the world. The SEAN and ECTAS networks have ensured that detailed accreditation visits to ECT clinics with carefully defined standards for all areas of practice for ECT occur across the United Kingdom and Eire. These examine psychiatric, nursing, and anesthetic practice.

ECT continues to get a bad press even when compared with more dramatic and irreversible procedures. In a newly published book written by a doctor about her treatment-resistant depression, Dr Cathy Weild describes the failure of multiple treatment regimens including ECT. On at least one occasion, she was paralyzed before being

anesthetized; however, she did respond to neurosurgery carried out in the Scottish National Neurosurgery for Mental Disorder Centre in Dundee. (Her ECT was not administered in Scotland).[2] It was also administered before the ECTAS inspection/accreditation described above.

It is a sad day when even ECT is compared unfavorably to neurosurgery.

The NICE Web site states that the ECT guidance is due for review from November 2005. I assume that this indicates the start of any review process. It is to be hoped that the articles in this volume will inform that process and influence the conclusions of the next appraisal committee.

REFERENCES

1. Schneider F, Harter M, Brand S, et al. Adherence to guidelines for treatment of depression in inpatients. *Br J Psychiatry*. 2005;187:462–469.
2. Weild C. *Life After Darkness.* London: Radcliffe Medical Press; 2006.