ORIGINAL PAPERS

Electroconvulsive therapy practice in north-west England

Susan M. Benbow, David Tench and Simon P. Darvill

This study surveyed north-west consultant psychiatrists regarding their clinical electroconvulsive therapy (ECT) practice. A postal questionnaire was sent to all consultants identified by contacting north-west hospitals. Most respondents were in favour of using ECT, primarily for depressive psychosis. Bilateral ECT, twice weekly, was the preferred means of administration. Practice was similar overall to Pippard and Ellam's findings in their national survey. Prior to the latest College ECT guidelines, there had been little change in clinical ECT practice in the north-west since Pippard and Ellam's national survey.

Pippard & Ellam (1981) carried out a national survey of use of electroconvulsive therapy (ECT). Since then there has been considerable change in the technology of treatment (Lock, 1995) and the Royal College of Psychiatrists has published new guidance on ECT (Freeman, 1995). This survey was carried out before new guidelines were published to explore current practice and whether it had changed since Pippard & Ellam's report.

The study

Hospitals in north-west England were contacted for an up-to-date list of their consultant psychiatrist staff. Use of ECT questionnaires were sent to all staff. Questions were derived from Pippard & Ellam's report (1981) and covered areas (a) details of respondent's post; (b) opinion of ECT and its appropriateness in various psychiatric conditions; (c) investigations carried out prior to ECT; (d) ECT practice; (e) contra-indications to ECT.

Findings

One hundred and forty-six questionnaires were sent out and 122 replies were received (response rate 82.9%).

Details of respondents

Eighty-two respondents worked 10 or more sessions and 20 worked nine sessions or fewer; 118 confirmed that they were consultants. The field of psychiatry in which respondents were working was general psychiatry 65%, old age psychiatry 16%, child psychiatry 2%, psychotherapy 2%, learning disability psychiatry 5%, drug dependence 2%, forensic psychiatry 7%. Thirty-four per cent of respondents worked in teaching centres.

Opinion and prescription of ECT

One per cent of respondents stated that they never used ECT, 3% were generally opposed to the treatment, 1% had no opinion on ECT, 93% of respondents were generally in favour of ECT for appropriate patients and 2% did not indicate their view. Eighty-three per cent of respondents had prescribed ECT in their current post.

Appropriateness of ECT in various conditions

Respondents rated how often ECT is appropriate in various diagnostic groups: divided into the categories often, sometimes, rarely and never. As in Pippard & Ellam's report, the results have been analysed as if the four categories were an arithmetical series, attaching a value of +2 to often, +1 to sometimes, −1 to rarely and −2 to never. A value of 0 has been given to any missing cells or undecided. The mean deviation from 0 has been calculated for each condition by summing the products of the figures in each cell and the assigned arithmetical value and dividing by the total. A deviation of +2.0 would indicate that every respondent had chosen often appropriate and a value of −2.0 would indicate that every respondent had chosen never appropriate. Thus a positive score indicates that the balance of opinion favoured the use of ECT at some point in treating that condition and a minus score the reverse. The mean scores are presented in Table 1.

The only three conditions listed which achieved a positive score were depressive psychosis, schizoaffective disorder and depression with dementia.

When is ECT the treatment of choice?

ECT was considered the treatment of choice as follows: depressive illness not responsive to antidepressant drugs 53%, depressive illness

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Table 1. Opinions of north-west psychiatrists on the appropriateness of electroconvulsive therapy in various conditions with comparison with Pippard & Ellam's (1981) survey and Benbow's (1991) survey of old age psychiatrists

Condition	Mean score	Benbow (1991)	Pippard & Ellam (1981)
Reactive depression	−1.1	−0.9	−0.8
Depressive psychosis	1.6	1.6	1.7
Schizoaffective disorder	0.7	0.4	0.7
Acute schizophrenia	−0.6	−1.2	0.1
Chronic schizophrenia	−1.3	−1.5	−0.7
Mania	−0.2	−0.4	0.4
Substance misuse	−1.9	−2.0	−1.7
Personality disorders	−1.9	−1.9	−1.7
Sexual dysfunction	−1.9	−2.0	−1.8
Intractable pain	−1.6	−1.2	−1.2
Hypochondriasis	−1.4	−0.7	−0.7
Acute confusional states	−1.9	−1.8	−1.5
Chronic confusional states	−1.9	−1.9	−1.7
Depression with dementia	0.1	0.2	0.3
Epileptic disorders	−1.6	−1.9	−1.0
Anorexia nervosa	−1.8	NA	−1.4
Children under 16 years	−1.5	NA	−0.9

responsive in past to ECT but not to drugs 85%, psychotic depressive illness 61%, depressive illness with severe agitation 52%, depressive illness with high suicidal risk 67% and depressive illness with refusal to eat or drink 89%.

Investigations to be carried out routinely before ECT

Investigations which might be carried out routinely before ECT were supported as follows: physical examination 95%, electrocardiogram 59%, chest X-ray 58%, haemoglobin 72%, urea and electrolytes 73%, skull X-ray 7%, erythrocyte sedimentation rate 34%, syphilis serology 12%, sickle cell test 14% and other (thyroid function) 1%.

ECT practice, contraindications and major complications during treatment

Fifty-seven per cent of respondents stated that they would usually use bilateral ECT, 22% unilateral treatment and 16% either, with no preference. Twice weekly treatment was usual (88% of respondents). Respondents were asked to state which conditions they considered to be absolute or relative contraindications to ECT (Table 2). No additional contraindications were added.

Respondents were also asked about their usual practice regarding concurrent medication during a course of ECT. A majority of respondents would always or preferably stop monoamine oxidase inhibitors (53%) and benzodiazepines (59%), though not other anti-convulsants (43%). Smaller percentages would prefer to stop tricyclic antidepressants (22%), neuroleptics (17%) and lithium (7%). Rauwolfia alkaloids would be stopped by 44%, with 42% undecided.

Twenty-five per cent of respondents had experience of death or major medical complication occurring during ECT and 9% had had personal experience of a defibrillator being used, although only 3% had seen it save a patient's life. No one indicated that a defibrillator had not been available when needed. Thirty-two per cent stated they had had difficulties getting anaesthetics for medically ill people.

Comment

Most respondents (93%) were in favour of the use of ECT for appropriate patients and this is not surprising given the results of previous surveys. Pippard & Ellam (1981) reported a corresponding figure of 83%. Bilateral ECT was used by the majority of respondents in this study and in two other UK surveys, Pippard & Ellam (1981) and Benbow (1991). These three studies all found usual practice to be twice weekly treatment.

Table 1 compares the appropriateness rating for the use of ECT in three populations, north-west psychiatrists, the national survey (Pippard & Ellam, 1981) and old age psychiatrists (Benbow, 1991). The ratings are remarkably similar overall. The balance of opinion in all three studies favoured the use of ECT in depressive psychosis, schizoaffective disorder and depression with dementia. Pippard & Ellam (1981) reported a low positive rating for two additional conditions, acute schizophrenia (0.1) and mania (0.4). Old age psychiatrists were more

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Table 2. Respondents views of contraindications to electroconvulsive therapy, %

Condition	Absolute	Relative	Irrelevant	Undecided
Any history of heart attack	1	70	19	11
Recent heart attack (<6 months)	15	69	6	11
Recent heart attack (<3 months)	43	44	2	11
Any history of CVA	7	66	16	12
CVA within 6 months	20	61	5	14
CVA within 3 months	43	43	2	12
Angina	2	75	13	10
Age >80 years	1	26	62	11
Age >90 years	1	34	53	12
Pregnancy	12	57	18	12
Hypertension	3	66	20	11
Epilepsy	2	42	46	10
Presence of cardiac pacemaker	18	51	18	13
Intracranial space occupying lesion	55	33	2	10
Raised intracranial pressure	77	11	2	10
Aortic aneurysm	40	42	4	14
Cervical spondylosis	4	60	24	12

CVA, cerebrovascular accident.

strongly opposed to the use of ECT in acute schizophrenia but might be presumed to deal with a different patient population (Benbow, 1991). Old age psychiatrists were more strongly in favour of using ECT as treatment of choice in all the situations listed, compared with north-west psychiatrists. Findings regarding investigations carried out before ECT are similar in this study to both other studies. Old age psychiatrists were more likely to require chest X-rays and electrocardiograms, but they might be presumed to be dealing with a group more at risk of respiratory and cardiovascular diseases. This may also reflect anaesthetic practice. Syphilis serology was more often required by Pippard & Ellam's respondents (33%) and by old age psychiatrists (35%) than by north-west psychiatrists (12%), possibly reflecting changes in disease over time and/or the different risks which different age groups are thought to run. Pippard & Ellam (1981) asked their respondents which conditions they regarded as a bar to ECT. Cardiovascular disorders were most often quoted (36% of contraindications) followed by intracranial disorders (26%). North-west psychiatrists completed a table indicating whether they regarded listed conditions as absolute or relative contraindications and the results are broadly similar to Benbow's (1991), apart from north-west psychiatrists being less likely to rate age over 80 or age over 90 as irrelevant (62 and 53% in this study, 85 and 73%, respectively among old age psychiatrists).

Old age psychiatrists (Benbow, 1991) were more likely to continue treatment with neuroleptics, tricyclic antidepressants, lithium and benzodiazepines during ECT. Concern about cognitive side-effects during treatment might have been expected to make old age psychiatrists more likely to discontinue concomitant drug treatments. Similarly, as older adults are more likely to have higher seizure thresholds (Lock, 1995) this population might be expected to be less likely to receive benzodiazepines during ECT. Perhaps this finding might reflect more agitation, distress or behaviour disturbance among older people suffering from severe depressive illnesses, leading to a greater perceived need for concomitant drug treatments.

More respondents in this study reported experience of a defibrillator being used than in Pippard & Ellam's report (1981). A similar number of north-west respondents reported difficulty in getting anaesthetics to the old age psychiatrists' survey (Benbow, 1991). This latter finding suggests that anaesthetic difficulties are not peculiar to practice with older people and may have implications for collaboration with anaesthetic departments: it has been suggested (Haddad & Benbow, 1993) that anaesthetists may not always appreciate the importance of their role in ECT.

This survey of ECT practice in north-west England found little change since Pippard & Ellam's survey in 1980. It was carried out before the latest Royal College of Psychiatrists guidelines were published in *The ECT Handbook* (Freeman, 1995). Practice may change in future in response to the new document and the recent programme of continuing professional education relating to the use of ECT carried out by the College. Since ECT remains an emotive treatment, it is important that we continue to strive towards best ECT practice throughout the UK.

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References

BENBOW, S. M. (1991) Old age psychiatrists' views on the use of ECT. *International Journal of Geriatric Psychiatry*, **6**, 317–322.

FREEMAN, C. P. (ed.) (1995) *The ECT Handbook*. London: Royal College of Psychiatrists.

HADDAD, P. M. & BENBOW, S. M. (1993) Electroconvulsive therapy-related psychiatric knowledge among British anaesthetists. *Convulsive Therapy*, **9**, 101–107.

LOCK, T. (1995) Stimulus dosing. In *The ECT Handbook* (ed. C. P. Freeman), pp. 72–87. London: Royal College of Psychiatrists.

PIPPARD, J. & ELLAM, L. (1981) *Electroconvulsive Treatment in Great Britain 1980*. London: Gaskell.

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