ECT Guide

Presenting the booklet designed to give an impartial presentation of the current evidence and advice on ECT.

Aimed at the patient, carer and lay person.
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The Scottish ECT Audit Network (SEAN) committee wishes to thank Mr Ian Kellagher for his work in the drafting of this booklet.

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WHY THIS BOOKLET HAS BEEN WRITTEN

Electroconvulsive Therapy (ECT) has been used in Scotland for half a century. It is viewed in the medical profession as safe, effective and painless, with a low risk of unacceptable side effects. Furthermore, psychiatrists believe it can save lives.

However, this view has not always been shared by the public; this is perfectly understandable. Much of what people believe about ECT comes from the way it is portrayed in films, television drama and documentary, where the purpose is often to entertain or to be controversial.

The concerns most frequently expressed are that ECT is ineffective, creates unacceptable side effects and is given disproportionately to the elderly, women and the disadvantaged.

Not only is there little or no scientific evidence to back up these concerns, but the results of the national audit carried out from February 1996 to August 1999, covering all ECT sites in Scotland, show these fears to be largely without foundation.

This booklet is drawn from recent literature and research published on ECT supplemented by findings of the National Audit.

WHY DID THE SCOTTISH EXECUTIVE HEALTH DEPARTMENT CARRY OUT AN AUDIT?

The aim of the audit was to produce improvements in the practices of each site where ECT is delivered. It is intended that these improvements be monitored and maintained in the long term by encouraging local ownership of the audit and its results.

Following a postal survey in 1994 of ECT practice, psychiatrists in Scotland obtained a grant from the Scottish Executive to undertake an audit of ECT to find out as much as possible about facilities, staffing, training, usage and effectiveness.
All 35 ECT consultants in Scotland were recruited as local co-ordinators and the Scottish Electroconvulsive Therapy Audit Network (SEAN) was formed. This group met twice a year for the duration of the project encouraging local ownership of the audit and its results. A pilot study was carried out and the audit itself was undertaken in three phases between 1996 and 1999.

To ensure that all areas of practice were examined all members of the ECT clinical teams took part; psychiatrists, anaesthetists and nurses. During the audit all patients who had ECT in Scotland were included, for example in phase two (between August 1997 and April 1998) this involved 794 patients.

The last phase of the survey (August 1998 to July 1999) involved unannounced visits to each ECT site, to view treatment sessions and to check if safe and correct procedures were used. Attention was also paid to the atmosphere in the ECT suite.

Some sites were found to have very high standards from the outset, but where this was not the case, appropriate action was taken. For example, the only site considered unacceptable in phase one, had been closed by phase three.

**BUT WHAT EXACTLY DOES THE AUDIT TELL US ABOUT ECT IN SCOTLAND?**

The survey’s findings can be summarised as follows:

- Approximately 1,000 people a year are given ECT treatment.
- The rate of ECT treatment in Scotland (1.42 per thousand every year) is as low as any found by comparable survey in the rest of Britain.
- In nearly three-quarters of cases (71.2%) there was a definite improvement in those patients treated for depressive illness.
- Over four-fifths of patients (81.8%) gave informed consent for the treatment.
- The use of ECT in the elderly (75 yrs and over) accounts for only 12% of the total number of patients given ECT.
- Twice as many women as men received ECT. The number of women admitted for depressive illness is also twice that for men. Depressed women in hospital are not more or less likely to get ECT than men.
- There were no significant regional variations in treatment or provision across Scotland.
- Prescription rates varied throughout the country but no significant trend could be seen for example, between hospitals serving rural, urban or mixed areas.
HISTORY OF ECT

In the 1930s it was noticed that people who had both epilepsy and mental health problems often became brighter or indeed, happier, after an epileptic seizure. ECT was introduced as a result of this.

In the past, ECT was used for a wide variety of problems, without anaesthetic and very long courses were given. THIS IS NO LONGER THE CASE. However, ECT remains controversial. Some people want it banned, others have claimed it saved their lives.

A great deal is known about how it works. We know more about how ECT and drug treatments work than we do about how psychotherapy works.

WHEN IS ECT USED?

A consultant may recommend ECT if:

- There has been severe depressive illness for some time and drug treatments have not or only partly worked.
- Illness is causing serious distress and making it impossible for the patient to function.
- Anti-depressants have been tried but stopped because of side effects.
- A patient’s life may be in danger because of not eating or drinking or because of suicidal feelings.

WHAT SAFEGUARDS ARE THERE?

- Usually ECT does not have to be given urgently. There should be plenty of time to discuss the treatment.
- It’s always important to talk to someone, a doctor, your GP, a nurse, close friend or trusted family member.
- Try to talk to other patients who have had ECT.
- If there is no one close to you that you can confide in ask the ward staff for advice as there may be an advocacy service in your hospital.
- If you are unsure don’t be afraid to ask your doctor to arrange a second opinion.
- Make sure that the alternatives to ECT have been explained to you. Make sure you know what will happen if you don’t have ECT.
CAN ECT BE REFUSED?

Normally, the treatment can be refused. The patient will be asked to sign a consent form before treatment starts and can withdraw consent at any time.

However, sometimes a doctor may decide to use ECT without a patient’s consent. All such patients are detained under the Mental Health (Scotland) Act. This happens if:

- A depressed patient’s life is in danger, for example through not eating or drinking.
- A patient is too ill or confused to give meaningful consent.

In these cases a specialist, appointed by the Mental Welfare Commission, has to agree that this is the best treatment.

*NO ONE SHOULD BE PUT UNDER UNDUE PRESSURE TO HAVE ECT. IF THERE ARE DOUBTS INDEPENDENT ADVICE SHOULD BE SOUGHT. SOMEONE IS ALWAYS AVAILABLE. SEE THE RELEVANT ADDRESSES AT THE END OF THIS BOOKLET.*

Remember however, in the latest survey, more than four fifths of all patients in Scotland (over 81%) gave their consent to the course of treatment.

CAN ECT BE GIVEN AS AN EMERGENCY?

In very urgent situations this can happen. If a consultant believes that a patient’s life is in danger because of severe depression then ECT can be given as an emergency. This usually only applies to the first one or two treatments. The Mental Welfare Commission must be contacted as soon as possible.

SHOULD ECT BE BANNED FOR PATIENTS WHO CAN’T CONSENT?

- If this happens about 20% of patients who now get ECT would not receive it.
- These patients would be those with the most severe depression.
- Such patients would be disadvantaged and deprived of an effective treatment.
- It is these patients who are among the most depressed and most in need of ECT.

CAN RELATIVES GIVE CONSENT TO ECT?

- The simple answer is ‘no’.
- No relative can give consent to treatment on behalf of another.
- It is good practice to always inform and then involve relatives in arriving at a decision.

The Mental Health (Scotland) Act 1984, which includes provision for the giving of ECT without consent, is being reviewed by the Millan committee.
WHAT ACTUALLY HAPPENS DURING AN ECT TREATMENT?

A general anaesthetic is given by a senior anaesthetist and this puts the patient to sleep. At the same time a muscle relaxant is administered. Then a carefully calculated electric current is passed across the brain via electrodes, for approximately 3 - 4 seconds. The effect is to trigger an epileptic seizure. Because of the muscle relaxant, there will be little movement of the body. It is not a surgical operation, no incision is made.

The patient will be unaware of the treatment because of the anaesthetic. The photographs and plan of the ECT suite show a typical layout and examples of equipment used.

HOW OFTEN IS ECT GIVEN?

Normally a course of treatments is needed but the prescription should be reviewed after each one. ECT is usually be given twice a week until the patient has had between six and twelve treatments. Some people may only need two or three. During the Scottish audit, the average number per course was 6.7.

WHAT ARE THE IMMEDIATE AFTER EFFECTS?

When the patient wakes up they will be back in the waiting area or in a recovery room. Once wide-awake, they will be offered a light breakfast.

A patient may have no side effects at all, but they may have a headache or feel confused for a while.
WHAT ARE THE RISKS?

The risks are small.

- The most commonly quoted low mortality rate for ECT does not adequately account for all the risks of treatment.
- Patients with a pre-existing medical condition are at increased risk of experiencing cardiac or respiratory problems following treatment.
- All ECT centres in Scotland use guidelines which stress the importance of pre-treatment medical assessments to identify and minimise any risk.
- The risk of a swing into manic mood is the same as for treatment with antidepressant drugs.
- Not having ECT also has risks. Studies have shown that depressive illness increases mortality rate and the suicide rate is higher in depressed patients not treated with ECT.

REASONS FOR DISCONTINUING ECT

During the audit in Scotland a record was kept of the reasons why a course of treatment was not completed as planned.

- The overall rate for treatment being stopped early was 6.7%, half of these were because the patient withdrew consent.
- The overall side-effect rate leading to the stopping of treatment was 4.1%. This is much less than the quoted rate in some studies (18-35% in one elderly population). In comparison the discontinuation of antidepressant drugs due to side-effects is reported at 28-31%.
- Out of the 1314 courses of ECT given, a significant medical problem was reported in 8 (0.6%) and an anaesthetic problem in 4 (0.3%) of cases. These rates are low compared to those in the literature.
- Two elderly patients died within one week of the ECT being discontinued. Both patients were known to suffer from coronary heart disease and were given ECT in an attempt to treat a life threatening depressive illness. Other audits of follow up after ECT have reported a similar finding.
- One patient committed suicide having initially responded to treatment.
- Acute confusion leading to stopping treatment was recorded in just over 1% of patients. This is much lower than the 10.8% rate quoted in the literature.

OTHER ADVERSE EVENTS

The survey could not record side-effects which did not lead to stopping treatment.

Studies have reported headache and nausea in 1.2 - 23% of cases.

The main problem that can occur is a temporary loss of memory.
MEMORY IMPAIRMENT AT ECT

- Memory impairment following ECT is common.
- Memory impairment can be associated with severe depression and can be marked even when patients have not had ECT.
- Some studies have shown that ECT does not increase the memory impairment already caused by severe depression.
- Despite this there is no doubt that short term memory impairment around the course of ECT and the few weeks afterwards is very common (60-70% of patients).
- Past memories can also be affected. It is difficult to know how much of this is caused by ECT and how much by severe depression.
- Memory impairment due to ECT recovers gradually over the six months following treatment though some patients only very slowly recover past memories and some have permanent gaps in their memory for some past events.

DOES ECT CAUSE BRAIN DAMAGE?

The straightforward answer is ‘NO’.

Brain damage can be of two types:

1. Shrinkage of the brain or loss of particular groups of cells.
   - There are many studies using modern brain scans which have shown that ECT does not cause such damage.

2. Impairment of function
   - This might not show up on brain scans.
   - It might be detected by tests of memory, concentration or ability to plan.
   - Most studies show that these abilities improve in patients who have had ECT. This is because ECT reverses depression not because of a direct positive effect on brain function.
   - This emphasises that depression itself has profound effects on memory, concentration and other mental tasks.

Could there be a small number of people who do have permanent memory changes after ECT?

- Yes, there are certainly patients who have lost memories from their past which have not returned even after many years.
- Detecting these gaps in individual memories has proved very difficult in large research studies.
- Even in this very small number of patients the ability to learn new facts remains intact.
WHY IS ECT CONTROVERSIAL?

- There is a lot of misinformation about ECT.
- ECT has become an important target for anti-psychiatry groups. Several such groups want ECT to be banned.
- Claims are made that ECT always causes brain damage, irreversibly changes personality or even causes breast cancer.
- The majority of ECT web sites on the internet are strongly anti-ECT. The most extreme ones state that ECT never does any good, if patients appear to get better it is because they are stunned, shocked or brain damaged.
- A common claim is that ECT works because it impairs memory, in other words it makes you forget why you were depressed. This is not true, getting better with ECT does not depend on memory impairment.
- Another often stated view is that ECT works because it is a punishment. This is because some severely depressed patients feel they are responsible for things going wrong. They may even feel they deserve to be punished and believe this is the purpose of the treatment.
- However most patients who have ECT do not feel so guilty and they still get better.

HOW TO COPE WITH MISINFORMATION

- Remember the internet has free access, anyone can say anything, you need to be selective about what you read.
- If you feel overwhelmed by negative views, speak to other patients, to staff or ask to speak to an advocate.
- Don’t be embarrassed. Discuss any information you have with members of the team treating you. If you are not happy ask for a second opinion.
- Our website has information on it and links to other sites.
WHAT IS THE STANDARD OF ECT IN SCOTLAND?

In Scotland, ECT is always delivered in an acceptable setting and to the standards required by the Royal College of Psychiatrists.

As the map shows, ECT is available across the entire country.

Since the initial survey of clinics in 1994 standards have been raised by the efforts of the clinical teams with improvements in facilities, equipment, procedures and training. The audit found that all sites in Scotland now use approved ECT machines and have protocols for treatment. This is considerably better than the last report from England and Wales.

The un-announced visit to watch an ECT session gave an opportunity to assess how well the treatment teams were following the protocols in place. At all centres, ECT was given safely and the protocols were followed.
IS THERE ROOM FOR IMPROVEMENT?

There is always room for improvement.

For example, the audit found that while all junior staff are receiving training and are supervised for their first ECT session, problems remain with continuing supervision. This is partly due to the fact that few consultants have protected time in their contracts for ECT. We have made clear recommendations about this.

One of the main conclusions of the audit was that more consultant-led teaching and supervision is needed if current standards of good practice are to be improved.

The important role of nursing staff in the delivery of ECT was highlighted and the audit has provided support to the Scottish ECT Nurses Forum. It was noticeable that the survey was completed most efficiently at those sites where the ECT nurse had an extended role often including patient preparation and follow up thereby improving the quality of the whole process. There may therefore be a case for the appointment of an ECT nurse specialist to every service.

ARE THERE ANY QUESTIONS STILL TO BE ANSWERED?

The audit made recommendations about documentation and legal procedures around consent. It could not consider in detail the validity of informed consent in every case.

Other controversial issues such as relapse rates and side effects, were outwith the scope of the audit. Such questions can only be answered by further research. It is to be hoped that the interest generated by the audit will lead to this being undertaken.
**IN SUMMARY**

In Scotland the standard of premises, ECT equipment and procedures for treatment with ECT meet The Royal College of Psychiatrists standard.

ECT is very effective in a routine clinical setting. The degree and rate of improvement is better than would be expected for either drug or talking treatments.

It is true that ECT is not effective for everyone, but the number of patients who do not improve is small.

Many of the public perceptions about ECT are not corroborated by the audit. For example, the notion that ECT is used disproportionately on the elderly, women or minorities is not borne out by the evidence.

The quality of ECT in Scotland is high and it is the aim of SEAN that it continues to improve.
APPENDIX

Advice and Support

Citizens Advice Scotland
Tel: +44 (0)131 667 0156
(Will direct you to your nearest bureau)

Manic Depression Fellowship (Scotland)
7 Woodside Crescent,
Glasgow,
G3 7UL
Tel: +44 (0)141 331 0344

National Schizophrenia Fellowship (Scotland)
Claremont House,
130 Claremont Street,
Edinburgh,
EH7 4LB
Tel: +44 (0)131 557 8969

Samaritans
Tel: 0345 909090
(charged at local rate)
Telephone number above is on the inside front cover of all phone books, UK wide. The number routes caller to nearest Samaritans office which has an available line at time of calling.

Scottish Association for Mental Health
Cumbrae House,
15 Carlton Court,
Glasgow,
G5 9JP
Tel: +44 (0)141 568 7000

Official Bodies

Mental Welfare Commission for Scotland
K Floor,
Argyle House,
3 Lady Lawson Street,
Edinburgh,
EH3 9SH
Tel: +44 (0)131 222 6111

Scottish Executive
Tel: 0345 741 741
Central Enquiry Unit
Further Information and Updates

References, comments, links and further information are available via this web site (www.sean.org.uk), or on request from:

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LAYOUT OF AN ECT SUITE

Layout of an ECT Suite