	PROTOCOL FOR THE ADMINISTRATION OF ELECTROCONVULSIVE THERAPY WITHIN BIRMINGHAM AND SOLIHULL MENTAL HEALTH (NHS) FOUNDATION TRUST
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1.0 INTRODUCTION

1.1 RATIONALE

There is substantial evidence that Electro Convulsive Therapy (ECT) is an effective treatment for symptoms in some psychiatric illness such as severe depressive illness, a prolonged or severe manic episode and catatonia.

This policy has been written with regard to NICE guidelines and following ECTAS recommendations as to standards. References for these original sources can be found in the bibliography.

1.2 SCOPE

The Electro Convulsive Therapy Protocol will apply to all health care practitioners that take part in ECT, including those who refer patients to the service and to staff who administer the treatment

There will be a lead Consultant with clinical responsibility for ECT. There will be a lead practitioner within the suite with responsibility to supervise and manage all day to day aspects of the service. There will be clearly defined management structures to divisional level.

The policy will provide a framework within which ECT will take place safely, with regard to patients dignity and with due regard to relevant legislation, within the Trust, and with which these principles can be demonstrably documented.

1.3 GENERAL PRINCIPLES

ECT will be carried out in a safe environment.

Treatment will be provided with regard to relevant legislation (principally the Mental Health Act 1983 and as amended by the Mental Health Act 2007, and the Mental Capacity Act 2006 but also the Human Rights Act and any other such legislation as is appropriate), and with regard to service users rights.

Decisions regarding clinical decisions (informed consent, anaesthetic safety and dosing, administration of ECT and follow up) will be appropriately documented (both on RiO and in the 'Blue book'), having regard to trust policies on confidentially and data protection. Such decisions will be taken by an appropriate senior member of the referring team, in conjunction with members of the ECT team where appropriate.

Protocols produced by the Trust regarding cardiac arrest, anaphylaxis and malignant hyperpyrexia will be available in the department, and will be followed.

The ECT clinic staff will follow other relevant Trust policies, for example manual handling, fire and data protection policies.

Service Users will be involved at every stage of their treatment.

The practise of ECT will always be carried out following the best available evidence.

The Trust will provide two clinic sessions per week, spaced several days apart (currently Tuesday and Friday, sessions to start at 7.30am). These days may be altered (for example, where they fall on a Bank Holiday). Four weeks notice will be given to In-patient wards, Mangers or to those already undergoing treatment.

In exceptional circumstances, treatment may be organised outside these times, by consultation with the ECT Nurse Manager.

In very exceptional circumstances, because of the perceived anaesthetic risk of a particular service user, it may be necessary to organise treatment within the theatre suite at a local District General Hospital. This will be organised through liaison between the ECT Nurse Manager and the Theatre suite Manager, but may be facilitated by the requesting Anaesthetist.

2.0 ELECTRO-CONVULSIVE THERAPY POLICY

2.1 BASIC PRINCIPLES

2.1.1 ECT is used to achieve a rapid response and a significant improvement of severe psychiatric symptoms when an intensive trial of other treatment options have proven ineffective or where the condition is potentially life threatening.

2.1.2 All referrals for therapy must be made on an individual patient basis and be based on documented assessment of the risks and potential benefits to the individual. Risk and benefits of alternative treatments must also be considered, and (where appropriate) discussed with the service user.

2.1.3 Previous response to ECT should always be taken into account prior to further courses of ECT being administered.

2.1.4 Documentation is considered paramount. The consent form, physical and mental state assessment, and individual treatment record are contained in a single booklet ('the blue book') which will remain in the service users Integrated Care Record at all times. In addition the ECT pre-assessment and ECT Anaesthetic and medical checklist sections on RiO must also be completed by the referring team.

In addition, an individual record of treatment will be maintained for each individual treated and this information will be retained in the ECT department, for future reference.

A record of those treated at each list (session) will also be maintained, along with a record of members of staff present at each list.

2.1.5 Treatment should be stopped when a clinical response has been achieved or if the service user has not responded after an adequate trial. There should be a documented assessment of the service user's mental state and cognitive function following each treatment, and at 3 and 6 months after the completion of a course of treatment (whether or not the treatment was successful). The responsibility for this lies with the referring team.

2.1.6 Continuation ECT is not recommended for prevention of relapse in depressive illness in NICE guidance, as there is considered to be an

inadequate evidence base. If it is to be considered for a specific patient, a full treatment plan including risks and benefits should be documented in the Integrated Care Record. It may be considered good clinical practise to obtain a second opinion from another consultant psychiatrist. For further details, see appendix 3.

2.1.7 ECT treatment can be provided on an-inpatient basis or an outpatient basis. Additional safeguards may be requested if treatment as an outpatient is being proposed.

2.1.8 ECT must only be carried out by professionals trained in its delivery, and the anaesthetic techniques required, and who maintain an appropriate level of skill through the regular clinical practice of ECT and continuing professional development.

2.1.9 All professionals administering ECT must be trained in the use of appropriate equipment.

2.1.10 Arrangements must be made for junior medical staff to be trained to an acceptable level of competency and to have access to supervision.

2.1.11 There will be a dedicated team as defined by the Royal College of Psychiatrists that includes medical staff (both Anaesthetists and Psychiatrists), nurses, recovery professionals, operating department practitioner and the service users named nurse or a nominated deputy of the named nurse. Trained staff must be present in sufficient numbers to maintain the safety of each treated individual.

2.1.12 All members of the team will undergo annual appraisal, job planning and continuing professional development in regard to their role within the ECT suite, and in addition to any such appraisal as is required within any other roles they have within BSMHFT. It is expected that this appraisal will normally be completed with the lead consultant.

2.1.13 All equipment used in ECT treatment and anaesthetic equipment must be checked prior to use, in accordance with local procedures.

2.1.14 All equipment must be maintained and serviced as required by the manufacturer.

2.1.15 There will be procedures for the operational management of ECT in the ECT suite.

2.1.16 ECT must be audited on a twelve monthly basis and will include treatment criteria, age and pre and post ECT mental health assessment.

3 CONSENT

3.1 INFORMED CONSENT

3.1.1 Where a service user is deemed to have the capacity to do so, the decision to prescribe ECT should be jointly made by the service user and the referring clinician responsible for treatment. It must be an informed decision enabled by appropriate information, including written information (including information translated into an appropriate language or into Braille). Where the service user does not speak English as their first language or where, for example, they require the services of sign language, appropriate arrangements should be made to engage the services of an appropriate, trained interpreter. The written and verbal information must emphasise the service user's right to withdraw consent at any time. Consent must never be obtained by coercion (e.g. by implying that the Mental Health Act will be invoked if consent is not given).

3.1.2 Written information provided to service users will include information on the nature of the treatment, the likely benefits (including likelihood of success), the risk and likelihood of adverse effects (including possible effects on working and autobiographical memory and other cognitive effects), the consequences of not receiving the treatment, alternative treatment options to ECT and that these will be available if the service user does not receive ECT. The Consent form will also detail possible Dental consequences of treatment. The consent form will also provide details in the unusual situation that ECT is being prescribed outside of NICE guidelines.

3.1.3 Written information will also include advice on not driving, operating machinery, drinking alcohol, signing legal documents or being solely responsible for childcare for 24 hours after each treatment. For those who receive the treatment as outpatients, there will be advice on being accompanied home.

3.1.4 Except in an emergency, services users should have at least 24 hours to reflect on the information they have been given before being asked to sign a consent form.

3.1.5 Where a service user has capacity to give informed consent, this fact must be documented in the relevant section of the blue book by the treating teams', and on RiO. In addition, ECT staff will indicate that they concur with the treating teams' capacity assessment at each session.

3.1.6 Valid consent must be obtained whenever possible. (See Trust Consent Policy for further information.) The consent form in use (the blue book) for ECT in this Trust must be used.

3.1.7 The maximum number of treatments (usual maximum is 12) planned in the course will be stated on the consent form and a copy provided to the service user. If more than 12 treatments are considered, a new consent form must be completed.

3.1.8 When an informal service user is consenting but does not have the physical ability to sign the consent form, a consent form should be used, and their consent witnessed (preferably by an independent observer).

3.1.9 It is legally possible to give ECT to an incapacitated patient under the Mental Capacity Act 2005, (where a patient lacks capacity to give informed consent, there is no advance directive, where it is in a patients best interests to provide such a treatment, and where there is no objection from the patients Donee or the Court of Protection, or such other advocate as may be appropriate and where this is seen as being in the service users best interest). A 'Best Interests' meeting should be held between professionals and the service user, and such advocates as are appropriate, and properly documented. Prescribers, however, should remember that ECT is a special treatment under section 58A of the Mental Health Act 2007; as such the implication of the pathways of this section should always be considered preferable to the MCA.

3.1.10 The ECT unit will have a care pathway that facilitates the service users consent will be checked and agreed to prior to every treatment, and this will be documented

3.2 ECT AND THE MENTAL HEALTH ACT

The pathways into ECT using the Mental Health Act (amended 2007) are detailed within the blue book (to which the reader is referred). It is a central tenet of provision of ECT services that the treatment must be legally applied. Failure to adhere to the approved protocol will result in the postponement of treatment until legal documentation is completed. A flow diagram is provided in appendix 2.

3.2.1 Service users who are detained under a section of the Mental Health Act 2007 (s2, s3 or s 37) but who have given informed consent, must have a

valid certificate of capacity completed by the Approved Clinician and this must be available in the patients notes at all treatment sessions.

3.2.2 Where a service user is detained under a section of the Mental Health Act 2007 and does not, or cannot give, informed consent and the Approved Clinician still considers treatment necessary, the Care Quality Commission must be contacted and the advice of a Second Opinion Appointed Doctor must be sought in all cases (Section 58A MHA 2007). Treatment will not be administered without a copy of the section papers and a valid certificate being available at every treatment session (except in the case of section 3.2.3)

3.2.3 For those service users detained under the Mental Health Act, when a treatment is considered urgent, up to two emergency treatments can be given under Section 62 (Mental Health Act 1983) (a separate form being supplied for each treatment). The tests of whether a treatment can be given under s62 are very strict. The treatment must be immediately necessary to save a service users life or to prevent an immediate deterioration in their condition. The appropriate form must be signed by the Approved Clinician and be available for scrutiny in the clinical record. The CQC should have been contacted to obtain an appropriate certificate from a SOAD.

3.2.4 The lead clinic nurse and treating psychiatrist will check all appropriate paperwork prior to the commencement of a list. If appropriate paperwork is not available in the service user's notes at the beginning of a treatment list, treatment cannot proceed.

3.2.5 The ECT nurse will ensure the service users pulse, temperature and blood pressure are recorded immediately prior to entering the treatment room. The service user will be encouraged to empty their bladder.

3.3 ECT AND YOUNG PEOPLE

3.3.1 The role of ECT in those under the age of 18 years remains controversial. If ECT is ever considered for administration to under 18's, the case MUST be referred to the Medical Director. The prescribing of ECT to under 18's is the subject of a separate section under the Mental Health Act 2007 (section 58A(4)), the provisions of which must be followed irrespective of whether the patient is informal or detained.

3.3.2 If ECT is administered to someone under the age of 18, it shall be at a separate session where no adults are being treated.

3.3.3 For those under the age of 18, the lowest possible dose needed to induce a seizure shall be given.

4 PRE-ECT ASSESSMENT

4.1.1 PRINCIPLES

ECT is considered to be American Society of Anaesthesiologists level 2 surgery. As such it is generally a safe treatment. Against this, however, it should be remembered that the ECT suite is geographically distant from the facilities of a District General Hospital, and that some patients, particularly the elderly, have additional pathologies which increase the risk of anaesthetic complications. Appropriate pre-operative assessment is therefore extremely important.

4.1.2 In order to facilitate the anaesthetic assessment, appropriate investigations should be organised following the protocol in appendix 1. The responsibility for organising these investigations lies with the service users own team.

4.1.3 Appropriate past medical and past anaesthetic history, current medication, results of a full physical examination and the results of current appropriate investigations will be documented in the blue book and on RiO by the referring team.

4.1.4 The Service users Approved Clinician should indicate (in the blue book) that the psychiatric indication for referral for ECT falls within the NICE guidelines, or (if it does not) why ECT is appropriate, and that the service user is aware that this course lies outwith normal practise.

5 ANAESTHETIC ASSESSMENT

The Lead Anaesthetist at every session will be a Consultant or Associate Specialist.

5.1 The Anaesthetist has responsibility to assess the fitness for anaesthetic of the service user. This assessment should be documented on RiO and in the blue book.

5.2 Where there is reasonable doubt about the fitness for anaesthetic of an individual service user, the referring team have a responsibility to discuss relevant findings with the Anaesthetist BEFORE the first day of proposed treatment.

5.3 Where the Anaesthetist deems the risk of proceeding with the treatment to be too great, they shall be the final arbiter.

5.4 The Anaesthetist will follow 'Recommendations for standards of monitoring during anaesthesia and recovery' Association of Anaesthetists of Great Britain and Ireland (2000) (or any document that supersedes it).

5.5 The anaesthetist will check the anaesthetic equipment and prepare the anaesthetic agents.

5.6 Before induction the Anaesthetist will check that dentures have been removed or are secured.

5.7 The Anaesthetist will explain to the service user what they are doing, and check that there were no untoward effects of the anaesthetic at the previous treatment session.

5.8 Once induction is complete the Anaesthetist will insert a bite block and ensure that the service user is protected during the treatment.

5.9 After the treatment is complete the Anaesthetist will be responsible for recovering the service user, until they deem it safe to hand over the care of the service user to the recovery nurse.

5.10 After each treatment the Anaesthetist will complete the relevant sections of the blue book and the individual patient record, indicating the names and doses of drugs used, and any complications encountered.

5.11 The Anaesthetist will not leave the department until they have satisfied themselves that all those who have received treatment are sufficiently recovered that it is safe to do so.

6 THE ADMINISTRATION OF ECT

6.1 PRESCRIBING BY THE REFERRING TEAM

6.1.1 The precise reason(s) that ECT works has yet to be elucidated.

6.1.2 The referring team should indicate (in the blue book) whether the prescription is for unilateral or bilateral ECT. The default position for administration is bilateral stimulation. Service users who are elderly, prone to post-ictal confusion or who have a degree of pre-existing cognitive impairment may be considered candidates for unilateral stimulation (at the discretion of the referring team).

6.1.3 The decision to continue a course of ECT is a matter of judging likely clinical improvement against the emergence of treatment related side effects.

6.1.4 For this reason no more than 2 treatments should be prescribed at any one time. An interim assessment of clinical improvement and the presence of cognitive side effects should be made and documented in the blue book.

6.1.5 ECT should continue to be prescribed until the patient is recovered, or until it is demonstrable that the patient will receive no further benefit from continued treatment. Any service user who has shown no response after 6 treatments should be considered for cessation of treatment (unless they have previously shown a tendency to respond late in a course).

6.1.6 ECT should not be administered more than twice a week.

6.2 ECT ADMINISTRATION

6.2.1 Routinely, ECT should be given with a constant current brief pulse stimulus. The ECT machine should have the facility for 2 channel EEG monitoring. The ECT machine will be capable of delivering flexible doses, including very low stimuli.

6.2.2 The psychiatrist administering ECT should only do so after appropriate training, and with continuing supervision.

6.2.3 The administering psychiatrist should satisfy himself or herself that the treatment is prescribed. Any missing prescription should only be completed by a member of the referring team.

6.2.4 The administering psychiatrist should ensure that all relevant legal documents are available and scrutinised prior to the service user being brought into the treatment room.

6.2.5 The initial stimulus dose for a new patient depends on a number of factors. Drugs (including anti-convulsants and benzodiazepines), being male and bald, and increasing age will increase the seizure threshold. As a general rule, keeping the dose as low as possible will reduce the likelihood of the emergence of side effects (particularly cognitive side effects). However, this must be weighed against any delay in starting therapy due to missing seizures initially.

6.2.6 ECT is of itself anti-convulsant. As such, it is not uncommon for the seizure threshold to rise during a course of treatment. This may be seen when over a number of treatments, a service user shows shortening of the length of seizure time. The administering Doctor should therefore consider whether the dose should be increased.

6.2.7 Similarly, it may be reported that a patient is not showing the clinical improvement that might be expected (only providing that enough treatments have been given; 5 or 6 treatments may be the appropriate time to consider this). In these circumstances the administering Doctor may consider increasing the dose to be administered. (see also section 6.2.17)

6.2.8 Some older patients may develop post-ictal confusion or have a history of post-ictal confusion. It may be appropriate in these cases to consider unilateral ECT, which should be confirmed with the referring team.

6.2.9 The administering psychiatrist will assist in the placement of the EEG electrodes.

6.2.10 The administering psychiatrist will ensure that the treatment electrodes are placed appropriately and squarely to the patient's head, and that an adequate amount of electro-conductive gel is applied.

6.2.11 The administering psychiatrist will ensure that the electrical impedance is at a low enough level before proceeding, as measured by the ECT machine.

6.2.12 The administering psychiatrist will ensure adequate contact between skin and electrodes during the application of the stimulus.

6.2.13 Once the full stimulus has been applied, the administering psychiatrist will monitor the resulting seizure visually and by means of the 2 channel EEG.

6.2.14 An adequate seizure has occurred if there is visual or EEG evidence of a seizure lasting at least 15 seconds. If no seizure occurs, or if a seizure does not go beyond 15 seconds the administering psychiatrist should confer with the anaesthetist to see whether a second stimulus should be applied (depending on the residual level of anaesthesia). In this case double the previous stimulus should be given, preferably after the patient has been hyperventilated with oxygen.

6.2.15 No more than three (and normally, no more than two) sets of stimuli are to be administered in any one session to any one individual.

6.2.16 A prolonged seizure is one that continues for more than 2 minutes. In such circumstances, and after discussion with the anaesthetist, an appropriate benzodiazepine or propofol should be administered intravenously to stop the seizure.

6.2.17 Subsequent dosages of stimulus (titration) may be altered according to the results of previous treatments (e.g. untoward events, a fall in the duration of seizures, development of side effects) or if there is insufficient clinical improvement.

6.2.18 At the end of the treatment, the treating psychiatrist will complete the appropriate sections in the blue book and in the individual patient record noting the laterality of treatment, the stimulus applied, the quality of the seizure obtained, and the duration of the seizure. In addition they will confirm in the clinical record that consent was re-affirmed (for consenting service users) or that appropriate Mental Health Act documentation was inspected (for detained service users). They should then complete the information on that day's list.

6.2.19 The treating psychiatrist should not leave the department before confirming with the Anaesthetist and the clinic nurse that it is safe to do so.

RECOVERY

7.1.1 Recovery is the process by which an anaesthetised individual is enabled to overcome the effects of drugs administered, to regain consciousness and to be able to protect their own airway. Staff need to be competent at maintaining an airway and monitoring the overall clinical condition such that untoward events are identified early. To facilitate this, patients are routinely monitored by pulse and blood pressure monitoring and by the monitoring of oxygen saturation (oximetery). Other monitoring (for example of a patients ECG) may also be appropriate. A patient who is unconscious must never be left unattended.

7.1.2 The process by which a service user is recovered may be divided into 3 stages. The anaesthetist will be responsible for the first stage, which lasts until the individual is breathing for themself, has recovered their gag reflex and is responding to external stimuli. At this point the team will transfer the service user from the treatment room to the recovery room.

7.1.3 The ECT clinic nurse or ODP identified as recovery practitioner will monitor the service user until they are fully conscious, using the equipment stated above. They will document pulse, BP and oximeter readings. Should deterioration be noted they must immediately inform the Anaesthetist?

7.1.4 Recovery practitioners will be competent (and maintain their competence annually) at Enhanced Life Support. They should be fully conversant with suction techniques, using the electronic monitoring equipment and resuscitation techniques. In addition they will gently reassure the service user as they recover.

7.1.5 When satisfied that the service user no longer requires intensive monitoring, the recovery practitioner shall hand over responsibility to the named nurse (from the ward), and electronic monitoring may cease (the third stage). A drink will be offered to the service user.

7.1.6 The named nurse will stay with the service user throughout their treatment, and will accompany the service user back to the ward, once the ECT clinic staff are satisfied that a full recovery has been made.

MONITORING BETWEEN SESSIONS

7.2.1 The service users' clinical status and symptomatic response will be assessed and documented between treatments (by the referring team). Orientation and memory is assessed after the first treatment, and at stages throughout the treatment and this will be taken into account when dosage titration is being considered. Non-cognitive side effects and the service users' subjective experience of ECT will be assessed and documented. This may be facilitated by the use of memory logs.

ECT should be discontinued as soon as may be feasible. Factors which should be taken into account include perceived clinical benefit (or lack thereof), the emergence of side effects, including cognitive side effects and service user choice.

7.2.2 At the end of a course of ECT, the service user will have a clinical interview with their own team to establish whether any autobiographical or semantic memory loss has occurred, and this will be documented.

POST ECT FOLOW UP

7.3.1 Appropriate interventions should be planned and implemented to ensure that the benefits from ECT are not lost, (for example, a course of cognitive behavioural therapy and/or continued psychopharmacological therapy).

7.3.2 An assessment of mental state and a formal cognitive test should be completed (and documented) 3 and 6 months after completion of a course of ECT, (by the referring team).

The service users' subjective experience of ECT should be recorded 3 and 6 months after completion of a course of ECT. This may be facilitated by the use of memory logs. It may be appropriate to inform the service user that they might like to consider the possibility of an Advance Directive being drawn up regarding the possibility of them receiving ECT in the future. An Advanced Decision to Refuse Medical treatment may also be considered.

SPECIAL PRECAUTIONS

8.1.1 **High-risk patients** will be considered for treatment in an environment allowing rapid intervention should complications occur (for example a theatre suite or its anaesthetic room at a local District General Hospital).

8.1.2 **Day patients** and their carers will be given (and sign) a form (on every occasion they receive ECT) which confirms they will not drive for 24 hours (or longer if the anaesthetist advises), nor drink alcohol, nor sign legal documents and that they will be supervised by an appropriate adult for 24 hours, including on the journey home. In addition, where it applies, they shall not have sole responsibility for childcare.

8.1.3 **Mother and Baby** Patients from the Mother and Baby Unit who are receiving a course of ECT should not have sole responsibility for the care of their baby in the 24 hour period after each treatment. Mothers need to be aware that many anaesthetic agents will be found in breast milk post treatment. Alternative feeding arrangements other than breast feeding will need to be considered during the course of treatment.

IMPLEMENTATION AND COMPLIANCE

9.1 Responsibilities of Staff

All staff involved in ECT must adhere to this policy. Managers at all levels are responsible for ensuring that the staff for whom they are responsible for, are aware of, and adhere to, the policy. They are also responsible for ensuring staff are updated in regard to any changes in this policy.

9.2.1 Training

The Medical Director will work with the Workforce and Learning Directorate to ensure that training and education in ECT is available to those staff that require it.

Education on the subject of ECT will be provided at two levels; for clinicians who are involved in administering or prescribing ECT and for any other member of staff or service user / carer who is interested in the subject. The aim of the latter course is to reduce any misunderstanding around the use of ECT. The Trust is committed to support training of the clinicians involved in ECT and will support attendance and participation at related conferences and national groups.

In addition, members of the ECT team will have responsibility for maintaining their own mandatory training objectives as defined by the Trust (including intermediate life support, lifting and handling, infection control). The ECT team will also be supported in attending specific ECT related training as deemed appropriate. Where activity falls below 50 treatments per year, or where there is a gap of 3 months since treatment was last administered, arrangements should be made to ensure adequate practise is maintained (at an adjacent facility).

The Royal College of Psychiatrists considers that Doctors at various stages of training should have the following level of competency with regard to ECT.

Foundation doctors

Theory & background	**awareness**
Practical aspects of ECT	not required
Other aspects of ECT practice	not required

ST1-3

Theory & background	**working knowledge**

Practical aspects of ECT	**fully conversant**
Other aspects of ECT practice	**1-5 to be achieved**

ST4-6 & prescribing consultants

Theory & background	**fully conversant**
Practical aspects of ECT	**working knowledge**
Other aspects of ECT practice	not required

ECT consultants

Theory & background	**fully conversant**
Practical aspects of ECT	**fully conversant**
Other aspects of ECT practice	**1-8 to be achieved**

* for resuscitation training:

- Fully conversant = training in last year
- Working knowledge= last 5 years

Further details are available at

http://www.rcpsych.ac.uk/pdf/ECT%20competencies%20for%20web.pdf

REVIEW

9.1 This policy will be reviewed at the minimum of every two years.

REFERENCE DOCUMENTS

Scott A.I.F. (Ed), Royal College of Psychiatrists 2004, The ECT Handbook: the second report of the Royal College of Psychiatrists' Special Committee on ECT.

National Institute for Clinical Excellence T. Guidance on the Use of Electro-Convulsive Therapy (59). (http://guidance.nice.org.uk/TA59)

Royal College of Psychiatrists ECT Accreditation Service. (Ed. Ed Cresswell, Murphy & Hodge) Dec 2012. Standards for the Administration of ECT (10th Ed)

APPENDIX ONE

PRE- ECT ASSESSMENT

GUIDELINES FOR THE ASSESSMENT OF PATIENTS UNDERGOING ECT

This document is based on the NICE guidelines for the pre-operative assessment of patients undergoing surgery (June 2003) (www.nice.org.uk/page.asp?o=76793) to which the reader is referred.

ECT is classified as ASA grade 2 surgery, and these guidelines will only refer to this level of intervention.

The NICE guidelines are not based on empirical evidence; rather they have been drawn up on the basis of consensus of expert opinion. We have taken these guidelines and attempted to simplify them; in addition, given the nature of ECT we have asked for certain tests over and above those that are required in the NICE guidelines.

The determination of which tests are appropriate is based on a traffic light system. Tests in red **are not** required. Tests in green **are** required. Tests in Amber are to be considered and carried out if appropriate. Patients with respiratory, cardiovascular and renal disease are considered in this schema; the presence of other conditions may alter the need for other investigations. If in doubt, please ask your local ECT centre and discuss complex cases with the relevant anaesthetist.

Reading the tables.
The tables are to be read in terms of the patient's age, and in terms of the ASA (American Society of Anaesthesiologists) grading.

Grade 1 is 'No evidence of systemic disease'.
Grade 2 is 'a patient with mild systemic disease'.
Grade 3 is 'a patient with severe systemic disease'.
Grade 4 is 'a patient with severe systemic disease which presents a constant threat to life'. Patients with grade 4 disease are unlikely to be considered for ECT at stand-alone units and their case should be discussed with a Consultant anaesthetist in every case.

Pregnancy. Patients who might be pregnant require a pregnancy test result.
Sickle cell status should be established in those of afro-Caribbean origin.

ASA Grade 1: No renal, cardio-vascular or respiratory disease

Test	Age >16 to <50	Age > 50
CXR	**NO**	**NO**
ECG	**NO**	**YES**
FBC	**NO**	**YES**
Renal function	**NO**	**YES**
Random glucose	**NO**	**Consider**
Urine analysis	**Consider**	**Consider**

ASA Grade 2: Cardiovascular co-morbidity

Test	>16 to <50	> 50
CXR	**Consider**	**Consider**
ECG	**YES**	**YES**
FBC	**Consider**	**YES**
Renal function	**Consider**	**YES**
Random glucose	**NO**	**NO**
Urine analysis	**YES**	**YES**

ASA Grade 3: Cardiovascular co-morbidity

Test	>16 to <50	> 50
CXR	**Consider**	**Consider**
ECG	**YES**	**YES**
FBC	**Consider**	**YES**
Renal function	**YES**	**YES**
Random glucose	**NO**	**NO**
Urine analysis	**YES**	**YES**

ASA Grade 2: Respiratory co-morbidity

Test	>16 to <50	> 50
CXR	**Consider**	**Consider**
ECG	**Consider**	**YES**
FBC	**Consider**	**YES**
Renal function	**NO**	**YES**
Random glucose	**NO**	**NO**
Urine analysis	**Consider**	**Consider**

Lung function not normally required

ASA Grade 3: Respiratory co-morbidity

Test	>16 to <50	> 50
CXR	Consider	Consider
ECG	Consider	YES
FBC	Consider	YES
Renal function	NO	YES
Random glucose	NO	NO
Urine analysis	Consider	Consider

Lung function not normally required

ASA Grade 2: Renal co-morbidity

Test	>16 to <50	> 50
CXR	NO	Consider
ECG	Consider	YES
FBC	Consider	YES
Renal function	YES	YES
Random glucose	NO	NO
Urine analysis	YES	YES

Chest X ray should be considered if patient has other co-morbidity associated with renal failure (e.g. hypertension or heart failure)

ASA Grade 3: Renal co-morbidity

Test	>16 to <50	> 50
CXR	Consider	Consider
ECG	Consider	YES
FBC	YES	YES
Renal function	YES	YES
Random glucose	NO	NO
Urine analysis	YES	YES

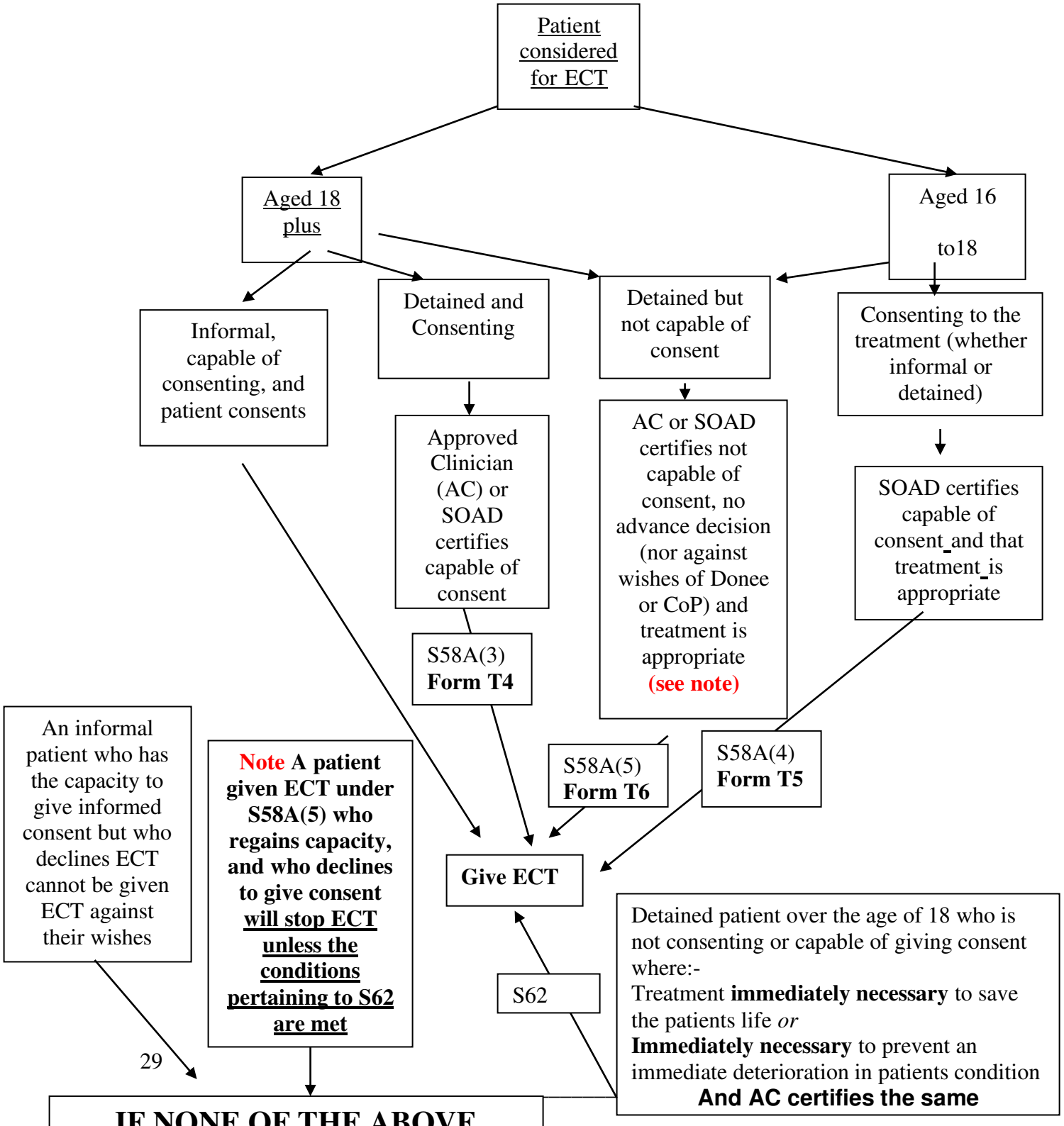
Consider need for blood gases.

APPENDIX TWO

Flow Chart: ECT and the Mental Health Act

ECT and the MHA 2007

(Effective Nov 2008)



APPENDIX THREE

PROTOCOL FOR THE USE OF CONTINUATION AND MAINTAINENCE ECT

Continuation ECT (defined as the intermittent (2 to 4 weekly) prophylactic administration of ECT in the first 6 months after a full course of ECT) has been used for many years in order to prevent relapse in some patients. NICE however considered that there was insufficient evidence to recommend its use. Nonetheless the American Psychiatric Association, amongst others, consider that it should be considered as a treatment option in certain circumstances.

Continuation ECT may be considered for patients who have relapsing or refractory depression that has previously responded well to ECT and where psychological and pharmacological treatment has proved ineffective in maintaining remission, or are poorly tolerated.

Maintenance ECT is defined as intermittent applications of treatments at periods of 1 to 12 weeks, from 6 months after completion of a course, and may continue for as long as deemed necessary. Again, it is not recommended under NICE guidance.

Continuation and maintenance ECT may be considered in the following groups:

1. Those who ask for it
2. Those who frequently relapse through poor compliance
3. Those with poor medication tolerance
4. Those with post ECT treatment relapse that do not respond to medication (0-12 months)

Exclusion Criteria

1. Recent myocardial infarction or CVA
2. Raised intracranial pressure
3. Acute respiratory infection
4. Past ECT confusion
5. Neurodegenerative disorder

6.

Assessment

A full review should occur (and be fully documented) ensuring a correct diagnosis, that treatment will be beneficial and that all alternatives have been explored. The service user (and, if appropriate, their family and carers) should be **fully informed** of the risks of treatment and of the alternatives to it.

The severity of the illness should be measured with an appropriate measuring tool, e.g. Becks or Hamilton rating scales.

Consent should be sought as per the ECT protocol. A full assessment of Capacity to consent should be recorded on the appropriate forms in the service users notes and ICR.

The consent form should state the maximum numbers of treatments to be administered. The service user should be asked to re-consent after every 12 treatments or every six months (whichever is sooner).

Full pre-anaesthetic screening should take place as per the Protocol.

Though not a statutory requirement, a second opinion is considered good practice. The proposed plan should be discussed with the ECT Consultant.

Treatment Plan

1. Only two treatments prescribed at any one time, and full review to take place after each second treatment.

2. Cognitive impairment, presence of side effects and clinical efficacy to be checked on a regular basis.

3. Frequency of treatment established

4. Service users' family or advocate to be involved wherever possible

5. Consideration should be given to the possibility of medication changes between extended treatment times

6. Information should be sought from community workers involved in the case and from the GP

Review

1. Monthly cognitive assessment is advisable

2. Side effects noted

3. Full anaesthetic review at least six monthly

Stopping Continuation ECT

Treatment should be reduced as a stable state is reached and no relapse occurs. A CPA should occur to formulate a risk assessment and treatment plan; observation of signs of deterioration is a key. All relevant professionals should attend.

Continuation or maintenance ECT should be discontinued when the service user has sufficiently recovered or when the benefits of continuing treatment are outweighed by the occurrence of side effects.

Legal Issues

Treatment given under the MHA 2007 may be difficult to obtain under section 58A(5) or under the Mental Capacity Act 2005. Informal status and informed consent are preferable for continuation treatment.

APPEDIX FOUR

TRANSPORTING OF PATIENTS

Procedure for Transfer to ECT in Oleaster

The new Oleaster Suite provides a state of the art ECT treatment suite. The suite has its own external entrance which should be used by patients other than inpatients on site. It also has a dedicated emergency access/egress for ambulances should the need arise.

The Role of the Escorting Nurse

- When a patient needs escorting from an inpatient ward to ECT, a nurse escort should be present from the host ward.

- The escorting nurse should ideally be a trained nurse. Each patient should be individually escorted. Therefore adequate staffing levels should be pre-arranged on the host ward to meet the staffing levels required on ECT treatment days.

- It is essential for the escorting nurse to have up-to-date immediate life support training (ILS), and desirable that they have a good knowledge of the ECT process and side effects, as well as familiarity with the ECT suite environment.

- Escorting nurses should know the patient they are escorting and be aware of their legal status, consent and any possible medical complications.

- Pre ECT checks should be conducted on the host ward including the patient's pulse and blood pressure and these should be recorded in the blue book.

- The escorting nurse should remain with the patient through the whole process until the patient is suitably recovered. This will be determined by the ECT doctor/senior clinician. The escorting nurse can then accompany the patient back to the host ward.

- Medical notes should accompany the patient along with a medication chart, physical observation information and prescription for ECT.
- Hospital transport should be used when transferring inpatients for ECT between sites. Where clinical need dictates, an ambulance may be necessary to transport the patient. The host ward should liaise with the ECT suite in arranging this transport. ECT has its own entrance on the west side of the South Localities building which can be used by hospital transport.

Out-patients receiving ECT Treatment

- Out-patients can make their own way to the ECT suite on the day of the treatment. Hospital transport may be used to ensure they arrive safely. They should be accompanied by a responsible adult when they leave the ECT suite.

- Out patients having ECT should remain in the treatment suite after their treatment until they are seen by a doctor/senior clinician. The doctor/senior clinician seeks to establish whether the patient is physically and mentally fit to leave. This should be recorded in the notes.

After ECT

Patients will have just had a general anaesthetic, therefore, they must:

- Be supervised by an adult at least until the following morning. There may be a need to consider use of respite facilities of in-patient beds (Care Co-ordinators role).
- Not leave hospital if they are feeling unsteady on their feet or confused.
- Not drive, ride a bike or operate any machinery or appliances for 24 hours.
- Not be left in sole charge of children until the following morning.
- Not sign any legal document or make important decisions for 24 hours.
- Not consume alcohol for 24 hours.

If they are concerned about how they are feeling, they should contact their care co-ordinator, or during the evening, an emergency G.P. If they are having difficulty getting help, they could go to the A&E department and ask to speak with the psychiatrist on call for the hospital.

<u>Please note</u> that the advice regarding driving refers to advice given to patients undergoing day case anaesthesia. For most of the psychiatric conditions for which ECT is prescribed, the DVLA advises at least 3 months elapses after recovery, before the patient recommences driving.

APPENDIX 5

STIMULUS TITRATION

Unwanted cognitive side effects are often a result of over stimulating patients in order to provoke a seizure. However it must also be remembered that severe psychiatric illness (and the treatment thereof) may also produce cognitive side effects.

In order to minimise side effects, at the first session where a patient presents for ECT the following protocol will be used to establish the seizure threshold (unilateral or bilateral).

ECT day number	Stimulus number	level
1	1 2 3	5% (25mC) 10% (50mC) 15% (76mC)
2 (if no seizure on day 1)	1 2	25% (126mC) 40% (172mC)
Rest of ECT course	Increase dose to 5 to 8 time seizure threshold (U/L) or 2.5 times ST (B/L) Reduce by 1 level if cognitive side effects troublesome Increase by 1 level if fit length drops below 15 secs. or if inadequate clinical response	

For a patient taking anticonvulsant drugs, increase the level on day 1 by 5%.