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Approval Process

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Content Table:

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Acronyms:

MOH	Ministry of Health
AMRH	Al Masarra Hospital
BLS	Basic Life Support
CBC	Complete Blood Count
CPR	Cardiopulmonary Resuscitation
DNR	Do Not Resuscitate
ECT	Electroconvulsive Therapy
ECG	Electrocardiography
EEG	Electroencephalography
EPAD	Electrically Programmable Analog Device
GA	General Anesthesia
Hz	Hertz
ICP	Increased Intracranial Pressure
MO	Medical Officer
TFT	Thyroid Function Test
(MMSE)	Mini- Mental State Examination

Policy and Procedure of Electroconvulsive Therapy (ECT)

1. Introduction

Al Masarra Hospital – Electroconvulsive therapy unit is providing this policy and procedure as a guideline in standardizing the procedure of Electroconvulsive Therapy (ECT) for the development and improvement of quality treatment and care for ECT patients.

2. Scope

This document is applicable to all Healthcare provider of Al Masarra Hospital (AMRH).

3. Purpose

3.1 To provide guidelines for the correct preparation, administration and post-ECT care of patients undergoing treatment.

3.2 To establish a standardized approach in delivering ECT within the Ministry of Health (MOH) standards of practice and operate within the legal parameters associated with ECT treatment.

4. Definitions

4.1 Electro-convulsive Therapy (ECT): is a medical procedure in which a very controlled electric current is briefly dispensed to the brain by computerized equipment via electrodes applied to the scalp to induce generalized tonic/clonic seizure activity.

4.2 Maintenance ECT treatment: refers to the treatment session once every week or fortnightly in those cases that have responded well to the therapy and are prescribed to continue the therapy by the treating psychiatrist for a few months to prevent relapse.

4.3 Tonic-Clonic seizure: the classic type of epileptic seizure consisting of two phases. In tonic phase, the body becomes entirely rigid and the clonic phase is with jerking movement.

4.4 Seizure threshold: the level of neurological stimulation capable of precipitating a seizure.

5. **Policy**

5.1 Ensure that all health care provider concern who involved in providing ECT fully understand their responsibilities, and patients receives the highest standard of care.

5.2 All health care provider concern who working in the ECT suite have a responsibility to ensure that this policy is adhered to and must report any difficulties and failures to do it to the Consultant Psychiatrist responsible for ECT.

5.3 Clients must be cleared by multidisciplinary team such as psychiatrist, anesthetist, dentist and physician before starting ECT.

6. Procedure

6.1 Preparation for ECT

6.1.1 **Prescription of ECT**

6.1.1.1 ECT course should be prescribed by the consultant/Specialist Psychiatrist responsible for the care and treatment of the client.

6.1.1.2 Consultant/Specialist Psychiatrist concern should order ECT producer in the patient health record -Al Shifa System *(Refer to AMRH local site: how to use ECT program in al shifa system).*

6.1.2 **Assessment**

6.1.2.1 A cognitive assessment should be needed and completed by the treating team for the client before each program of ECT, (MMSE).

6.1.2.2 The patient's clinical status shall be assessed before and following each ECT treatment session by the treating team.

6.1.2.3 The consultant psychiatrist/treating team shall review the patient's progress and the need for continuation of the of ECT sessions. In the event of ECT session being terminated, reasons for this termination should be documented in the patient's health record.

6.1.3 Physical Examination

6.1.3.1 Any patient considered for ECT will be referred to anesthetist before ECT is due to commence. If the client has significant cardiovascular or respiratory disease, or other physical conditions that raise concerns, the anesthetist may require additional investigations or physician consultation and therefore, need to be contacted at the earliest opportunity after the decision to give ECT has been made.

6.1.3.2 Prior to starting a course of ECT, client's recent medical history shall be documented with physical examinations, Blood investigations and ECG report. A chest x-ray is performed if there are respiratory signs or symptoms. The required investigations are indicated in the ECT documentation to be completed by the referring psychiatrist/anesthetist.

6.1.3.3 ECT in certain cases: if ECT is indicated for a physically ill patient, physician might have to take opinion from the concerned specialty regarding safety of the procedure in that particular patient.

6.1.4 Contraindications for ECT

6.1.4.1 ***"There is no absolute contraindication to ECT"***

6.1.4.2 Relative contraindications for ECT**:**

6.1.4.2.1 Space occupying cerebral lesion (tumor, hematoma, etc.).

6.1.4.2.2 Increased Intracranial Pressure (ICP).

6.1.4.2.3 Untreated heart failure.

6.1.4.2.4 Recent intracerebral hemorrhage

6.1.4.2.5 Unstable vascular aneurysm or malformation.

6.1.4.2.6 Untreated respiratory failure.

6.1.4.2.7 Pheochromocytoma.

6.1.4.2.8 Untreated metabolic disorders.

6.1.4.2.9 High anesthetic risk.

6.1.4.3 Extra Caution for General anesthesia/ECT

6.1.4.3.1 Myocardial infarction within three months.

6.1.4.3.2 Significant cardiovascular or respiratory disease.

6.1.4.3.3 Habitual abortions or advanced pregnancy.

6.1.4.3.4 Loose tooth.

6.1.4.3.5 Morbid obesity.

6.1.4.3.6 Symptomatic hiatus hernia.

6.1.4.3.7 Recent fractures.

6.1.4.3.8 Severe osteoporosis.

6.1.4.3.9 Previous anesthetic problems.

6.1.4.3.10 Blood Pressure over 170/100 mmHg.

6.1.4.3.11 Fever.

6.1.4.3.12 Diarrhea.

6.1.4.3.13 Retinal Detachment.

6.1.4.3.14 Tuberculosis with history of hemorrhage.

6.1.5 Pre-Anesthesia assessment for ECT

6.1.5.1 Assessment for ECT shall be given by an anesthetist who has experience in providing anesthesia for ECT.

6.1.5.2 Formal identification of the client shall be confirmed by the anesthetist.

6.1.5.3 Clients are assessed for fitness to receive an anesthetic agent and ECT procedure. Any conditions likely to increase the risks of the procedure require a full assessment, treatment beforehand and discussion with the anesthetist and physician.

6.1.5.4 Ensure that a pre-anesthetic assessment has been carried out and recorded in the patient health record.

6.1.5.5 The assessment includes the following:

6.1.5.5.1 Any physical problem should be recorded and notified anesthetist

6.1.5.5.2 Detailed medication histories, including allergies or previous anesthetic difficulties are taken into consideration and recorded.

6.1.5.5.3 The presence or absence of dental problems

6.1.5.5.4 Blood investigation report

6.1.5.5.5 An ECG report.

6.1.5.5.6 Chest X-Ray report.

6.1.6 Dental examination

6.1.6.1 Dentist will be undertaken before commencement of ECT for all elderly patients (60 years old and above) or any patient suspected to have any loose teeth or any problems of the denture.

6.1.7 ECT Consent and Information

6.1.7.1 ECT procedure should only be started after ECT consent signed by the competent patient, next of kin or the legally authorized representative ,*(refer to Policy & Procedure of Informed Consent AMRH/ADMIN/P&P/011/Vers.01)*

6.1.7.2 ECT procedure should be Explain to patient, next of kin or the legally authorized representative by the consultant/Specialist psychiatrist and Anesthetist before starting ECT treatment.

6.1.7.3 **ECT consent** signed by competent patient or next of kin or the legally authorized representative , Psychiatrist and Anesthetist *(Refer to appendix5 : ECT consent)*

6.1.7.4 **High Risk Consent** is obtained in cases where client suffers from physical illness but ECT is necessary with full explanation to family.*(Refer to appendix6 : special procedure consent)*

6.1.7.5 Documentation of ECT process and ECT consent shall be maintained in the client's clinical file (Al Shifa 3+ system/ ECT procedure /progress note).

6.1.7.6 Informed consent is considered valid and considered to have continuing effect for a maximum period of 90 days.

6.1.7.7 The following information should be explained before consent obtain :

6.1.7.7.1 The nature of the treatment of ECT.

6.1.7.7.2 Description of process of ECT.

6.1.7.7.3 Purpose of treatment with ECT.

6.1.7.7.4 Intended benefits of treatment with ECT.

6.1.7.7.5 Possible risks and complications like failure to obtain the desired result, discomfort, injury, need for additional treatment(s) and death.

6.1.7.7.6 Treatment alternatives to ECT.

6.1.8 Patient Preparation

6.1.8.1 Clients have to be restricted to nil-by-mouth from 6-8 hours prior to ECT administration

6.1.8.2 Patient Identification should be clearly maintained, *(refer to Policy and Procedure of Patient Identification and Verification AMRH/ADMIN/P&P/013/Vers.01).*

6.1.8.3 ECT documentation including ECT consent, ECT Chart and, pre ECT checklist shall be completed in the Al shifa system. *(Refer to appendix 4: pre checklist , appendix 3: ECT Chart)*

6.1.8.4 Jewelry, dentures, make up, hand watch, rings, nail polish, hair lacquer/gel have to be removed from the client. Contact lenses (client to wear glasses to the ECT Unit instead, if possible) and artificial eyes needs to be removed by the client before ECT procedure.

6.1.8.5 vital signs checked and recorded

6.1.8.6 Any changes in drug treatment or any drugs withheld night before ECT index session. The ECT team requires this information as changes in drug treatment may affect both physical response to ECT and interfere with seizure threshold.

6.1.8.7 Many drugs affect the seizure threshold and this is taken into consideration when clients are due to start a course of ECT; of particular withhold the following drug before ECT procedure :

6.1.8.7.1 benzodiazepines, e.g. Diazepam Clonazepam Bromazepam Midazolam

6.1.8.7.2 Mood Stabilizer e.g. Sodium valproate Lamotrigine Carbamazepine

6.1.8.7.3 Lithium carbonate: e.g. discontinuation of lithium will be decided by the unit team

Note: for epilepsy patient, no need to hold medications above

6.1.8.8 Where ECT is given to an outpatient, the patient should admit in A&E department before 6-8 hour to make sure of all pre ECT preparation is done. the referring team has to ensure as much as possible, that the client does not drive home, drink alcohol, use public transport unaccompanied, and should have a responsible adult to stay with him, to monitor his/her wellbeing for 24 hours after treatment.

6.1.8.9 Encourage the client to pass urine before the treatment to avoid incontinence during the procedure.

6.1.9 ECT unit preparation

6.1.9.1 The ECT team will ensure that the adequate resources and equipment specified by the Ministry of Health (MOH) are available for the safe application of ECT.

6.1.9.2 An ECT nurse ensures that the unit is properly prepared, organized and maintained

6.1.9.3 Prepare all materials and equipment in ECT unit which include:

6.1.9.3.1 ECT machine

6.1.9.3.2 Anesthesia machine

6.1.9.3.3 Stryker bed

6.1.9.3.4 Emergency trolley should be ready and contains all necessary drugs

6.1.9.3.5 Centralized Oxygen and spared oxygen cylinder, mask, humidifier , Oro-Pharyngeal Airway , ET Tubes

6.1.9.3.6 Suction machine,

6.1.9.3.7 An ECG monitor.

6.1.9.3.8 Glucometer.

6.1.9.3.9 slide scale to help turn client

6.1.9.3.10 Mouth gage

6.1.9.3.11 Laryngoscope

6.1.9.3.12 ECG leads

6.1.9.3.13 Surgical equipment: Syringe, Cannula, Glove, Gauze, Tourniquet, Alcohol Swabs, etc.

6.1.9.4 The following drugs are stocked in the ECT Unit:

6.1.9.4.1 An aesthetic induction agent: Thiopental Sodium, Propofol

6.1.9.4.2 A muscle relaxant: Suxamethonium and alternative.

6.1.9.4.3 Others include: Atropine, Glycopyrolate, diazepam as agreed with ECT anesthetist.

6.1.9.5 ECT Machine preparation :

6.1.9.5.1 Ensure that the ECT machine and all other electrical equipment has been serviced and passed a safety inspection annually by the biomedical Engineer.

6.1.9.5.2 The ECT machine automatically self-tests when switched on and will indicate if there is a fault.

6.1.9.5.3 Ensure electrodes are checked by the ECT nurse on the day of the ECT session. Observe the machine for corrosion of wires and loose contacts. If any faults are evident, the electrode set must be replaced and the faulty should be sent for repair and inform biomedical Engineer.

6.1.9.5.4 Ensure that the ECT machine is capable of providing stimuli according to current guidelines.

6.1.9.5.5 The ECT nurse ensures that the machine function and maintenance are checked and recorded at least every year or according to machine guidance.

6.2 Receiving the client

6.2.1 Received and Taking over From Escort Nurse

6.2.2 Ensure correct client identification for ECT

6.2.3 Document pre-ECT checklist and receiving note in Al Shifa 3+ system/ECT program

6.2.4 Explain ECT procedure to the client

6.2.5 Take vital signs: ECG , BP, Pulse, Respiratory rate, Temperature,

6.2.6 Clean the frontal and temporal region with spirit then connect ECG leads and ECT electrode

6.2.7 Insert IV cannula for anesthesia induction.

6.2.8 Keep the client in lying down position, removing the client`s shoes will allow a clear observation of the client`s extremities during the treatment.

6.2.9 Ensure that the psychiatrics , anesthetist and staff are present for ECT procedure

6.3 Administration of ECT

6.3.1 Anesthesia for ECT

6.3.1.1 Anesthesia for the procedure will be accompanied by muscle relaxation to modify convulsions.

6.3.1.2 The anesthetic induction agent used for the client has to remain consistent throughout the duration of ECT program unless such an approach is contraindicated.

6.3.1.3 Thiopentone Sodium and Propofol is the main anesthetic agent used. Etomidate may be an alternative

6.3.1.4 Suxamethonium is used as muscle relaxant to induce paralysis. It is important in clients with slow circulation times to wait for thorough depolarization and termination of fasciculation before ECT is given. Fasciculation may be confused with seizure activity.

6.3.1.5 When the doses of all anesthetic agents are used, the client's response and the vital monitor recordings before and during treatment and recovery should be recorded with date and the record signed by the anesthetist.

6.3.1.6 The client has to be well ventilated with Oxygen. Hypoxia increases the seizure threshold in addition to being a significant risk itself.

6.3.1.7 Use a mouth gag to all clients for teeth protection.

6.3.1.8 Patient has to be under continuous Oxygen supply with monitoring of gas saturation until the time patient starts spontaneous breathing. In very rare cases, some patients may have "Prolonged Apnea" due to slow depolarization of

Succinylcholine. Apnea may last 30-60 minutes, requiring continuous assisted breathing. Such patients may require very low dose of succinylcholine or use of an alternative non-depolarizing muscle relaxant. Such events need to be documented and cause of prolonged apnea has to be investigated for likelihood and possibility of patient having deficiency of pseudocholinestrase enzyme.

6.3.1.9 Resuscitation / Cardiac Arrest during ECT

6.3.1.9.1 If an emergency arises during ECT, resuscitation shall be carried out using standard emergency drugs and equipment available in the ECT Unit. Standard resuscitation must be undertaken according to AMRH Policy. All staff assisting with ECT must have basic life support training and be familiar with the defibrillator and be aware of the local resuscitation policy.(Refer to Policy and Procedure of Cardiopulmonary Resuscitation (CPR) AMRH/GM/P&P/002/Vers.01)

6.3.1.9.2 Activate Blue Code (dial 700-ward name – dial 701)

6.3.1.9.3 Anesthetist taking over as leader for the situation.

6.3.1.9.4 ECT Nurse shall carry out any other instructions from Anesthetist.

6.3.2 Application of ECT

6.3.2.1 **ECT Equipment:** The equipment currently used is a fully computerized, Spectrum 5000Q by MECTA corporation USA.

6.3.2.2 A psychiatric resident/MO Psychiatry who has received appropriate training can administer ECT under supervision of a specialist psychiatrist.

6.3.2.3 **Stimulus dosing:** The primary consideration with stimulus dosing is to produce an adequate actual response whilst minimizing cognitive side effects and maximizing the rate of clinical response. The rate of clinical improvement during the course of ECT can be enhanced if the stimulus is moderately above the seizure threshold (moderately suprathreshold).

6.3.2.4 The initial stimulus dose of energy to be delivered to each client should be discussed and considered by the treating psychiatrist concern with the consultant

psychiatrist/specialist responsible for the administration of ECT in advance of ECT and will be prescribed accordingly.*(refer to appendix1 : ECT protocol's for energy level)*

6.3.2.5 The administering doctor ensures that the stimulus dose and administration technique are optimal and the energy is increased after every third treatment to get the adequate clinical response.

6.3.2.6 Seizure threshold is the minimum "dose" of "ENERGY" required to induce generalized tonic/clonic seizure activity. Seizure threshold varies markedly between clients, dependent on many factors, some of which are listed below:

Age	Raise
Anticonvulsants concurrently or recently discontinued	Raise
Baldness	Raise
Barbiturates concurrently or recently discontinued	Raise
Benzodiazepines concurrently or Recently discontinued	Raise
Bilateral electrode placement	Raise
Bones (thick), e.g. Paget's disease	Raise
Dehydration	Raise
ECT increasing number of treatments	Raise
ECT previous course within last month	Raise
Poor electrical contact with scalp	Raise
Oxygen saturation of blood (low)	Raise
Propofol (and other anesthetic agents)	Raise
Male Sex	Raise
Antidepressant and antipsychotic drugs	Lower
Caffeine	Lower
Carbon dioxide saturation of blood (low)	Lower
Hyperventilation	Lower

6.3.2.7 The optimal dose for ECT should be moderately supra-threshold. This is being as one and half to two times the seizure threshold for bilateral and at least four times for unilateral ECT for the treatment to be effective. Generally, this is confirmed by a generalized seizure of adequate length and a good clinical response. Grossly supra-threshold dosing exposes the client to the risk of cognitive side effects. Therefore, there is a therapeutic window with a lower limit to the dose of stimuli below which ECT is less effective and an upper limit over which, whilst clinically effective, the client may have unacceptable side effects. The therapeutic window can be established empirically by dose titration.

6.3.2.8 **Placement of Electrodes:** Placement of electrodes is based on an appraisal of the advantages and disadvantages for each client.

6.3.2.8.1 Bilateral (bitemporal) ECT: Electrode placement is 2-3 cm above the midline connecting external angle of the eye and external auditory meatus bilaterally.

6.3.2.8.2 Unilateral ECT: On the non-dominant side one electrode is placed same as bitemporal and the other at 2-3 to the right of the vertex of the skull.

6.3.2.8.3 Check the impedance of the Electrically Programmable Analog Device (EPAD) and it should be less than 1000 ohms. Too little impedance is suggestive of client sweating or spillover of conductive gel.

6.3.3 During ECT care :

6.3.3.1 Ventilation of oxygen for the client by the Anesthetist should be ensured. Oxygen supply maintains 6-8L/min.

6.3.3.2 Medication administration by Anesthetist: Short-acting Anesthetic, Short-acting Muscle Relaxant and Secretion Inhibitor.

6.3.3.3 Mouth gag should be placed by the Anesthetist

6.3.3.4 The electrodes are placed on each temporal region and the switch will be pressed by the Psychiatrist.

6.3.3.5 Support the client`s extremities, shoulder and hip joint by assistants staff nurse and medical orderly

6.3.3.6 The seizure induced is a typical generalized tonic-clonic convulsion.

6.3.3.7 The seizure duration is monitored by the direct observation of the resulting motor effects and two channels EEG monitoring/recording.

6.3.3.8 The Psychiatrist and anesthetist assess the client with attention to possible adverse effects and monitor clinical response to therapy

6.3.3.9 Observe the seizures, if the client gets tonic/colonic response less than 15 seconds duration; repeat the procedure on same setting. If still not showing adequate response, increase energy according to the ECT energy level protocol with provided the anesthetist agrees depending on the level of anesthesia and muscle relaxant to the client. If the third attempt fails, cancel the session

6.3.3.10 Monitor ECG and vital signs during the procedure

6.3.3.11 Clean the airway by using suction machine and administer oxygen until the client starts breathing by patient own self. This procedure is done by the anesthetist or by ECT staff under supervision.

6.3.3.12 After ECT has been given and the client is physically stable, client should be turned to the recovery position and ventilated until normal respiration resumes, then transferred to the recovery area.

6.3.4 Record of treatment

6.3.4.1 The psychiatrist administering the ECT has to record each separate application of ECT on the client's treatment chart. The dose of Energy given, whether the seizure was detected, partial or bilateral and the duration of the seizure should be recorded, signed and dated. Duration and authenticity of the seizure is based on EEG recorded with each session. Any unwanted events during or recovery is also documented by the psychiatrist conducting ECT. Next dose of Energy is documented as plan for the next session.

6.3.4.2 The anesthetist will complete the record of anesthesia, including the anesthetic induction agent dose, muscle relaxant dose, any ancillary medication, nature of ventilation, cardio respiratory changes, and any complications observed or treated during the treatment and recovery

6.3.4.3 ECT nurse will document vital signs during the treatment and kardex note in patient health record

6.4 Post ECT Care

6.4.1 After Anesthetist clearness, a trained Recovery Nurse will escort the client to the recovery room and will monitor recovery. Nurse will be stay with client until full protective reflexes and consciousness have been returned. Oxygen saturation, respiration, pulse rate, blood pressure and cognitive state have to be monitored and recorded. Any deviation from expected recovery shall be communicated to the anesthetist. Also record any observations as set out in the nursing checklist, which is in the client file.

6.4.2 When the client has been accompanied to ECT by a qualified Escort Nurse from the ward, this nurse will take part in the recovery process, under supervision from the Recovery Nurse. In certain circumstances, it may be more appropriate for another member of staff to be present e.g. an experienced healthcare assistant who has a good relationship with an anxious client. Unconscious clients need to be attended by a trained Recovery Nurse at all times.

6.4.3 Maintain the clients' airway and monitor/record vital signs at regular intervals or more frequently if complications arise.

6.4.4 The recovery nurse practitioner is competent in caring for the unconscious client and is fully conversant with aspiration/suction techniques, resuscitation procedures, including basic life support, and informs the anesthetist of any cause for concern.

6.4.5 A Post- ECT Checklist prompts the recovery nurse and escort nurse to check for the presence or absence of common or worrying side-effects at regular intervals after treatment.

6.4.6 The Escort Nurse should provide frequent reassurance and reorientation until the client retains the information.

6.4.7 ECT psychiatrist and Anesthetist should remain in the ECT unit until all clients recovers and clinical status is stable.

6.4.8 The ECT Nurse ensures that clients are not discharged until fully recovered

6.4.9 Document post-ECT assessments (clinical status, voluntary client progress) after each ECT treatment session in the patient's medical record. Reasons for continuing or discontinuing further ECT should be outlined. Any adverse events during or following ECT should be addressed in full and recorded.

6.4.10 Transfer to the ward after fitness of the Anesthetist

6.4.11 Post ECT care in the ward

6.4.11.1 The escorting staff nurse should assess, observed the patient during transfer to the ward with maintaining safety precaution.

6.4.11.2 Transfer to the bed and Make side rails to prevent fall

6.4.11.3 Check vital signs regularly

6.4.11.4 Keep the patient under close observation

6.4.11.5 Observe for any post ECT complications and notify the doctor.

6.4.11.6 After fully recovery provide food and medication accordingly

6.4.11.7 Remove the IV cannula.

6.4.11.8 Document ECT procedure in the patient health record.

6.5 Monitoring and Follow up :

6.5.1 Treatment outcome is adequately monitored and recorded between treatment sessions for clients receiving ECT and treatment appropriately adjusted in the light of this.

6.5.2 The client’s orientation and memory is assessed before and after the first ECT, and re-assessed at intervals throughout the treatment course.

6.5.3 The client has a clinical interview at the end of a course of treatment to establish any autobiographical memory loss, and this shall be documented.

6.5.4 Non-cognitive side effects are assessed and recorded between treatment sessions.

6.5.5 The client's subjective experience of treatment side effects and objective cognitive side effects are recorded between treatment sessions, for example, using a memory log.

6.6 Continuation/Maintenance ECT

6.6.1 In carefully selected clients, this can be an effective treatment for the prevention of severe depression, and reduce the number of ECT treatments the client requires. It is considered good practice to obtain a local second opinion to support the use of this treatment, and clients receiving the treatment need to be informed that the treatment along with an explanation of why it is recommended in their case.

6.6.2 It would be prescribed initially once every week in order to achieve a good clinical response, decreasing in frequency to the minimum required, e.g. monthly, in order to maintain a satisfactory clinical response. The prescribing psychiatrist would need to review the client at every treatment for the first three months and thereafter at least every three months. Evidence of these reviews need to be documented in the notes.

6.6.3 There are also regular reviews of the client's physical state and cognitive functioning.

6.6.4 The client's consent is regularly documented, either after an agreed interval of time or number of treatments.

7.Responsibilities

7.1 Psychiatrists /referring team Shall:

7.1.1 Referring clinical team should discuss the proposed treatment with the ECT team before starting the treatment.

7.1.2 Pre-ECT medical assessment is the responsibility of the patient's usual clinical team**.**

7.1.3 Each patient should have a full medical assessment by the ward/out-patient doctor with relevant blood investigations; ECG, and CXR if indicated and a pregnancy test if a woman is of child bearing age

7.1.4 Patients receiving ECT must be given adequate information about the treatment before signing ECT consent. Consent should by taking by treating doctor at level of specialist and above

7.1.5 The consultant psychiatrist referring a patient for ECT must document in patient's file all assessment of capacity and the patient's consent.

7.1.6 If a decision is made to administer ECT to a patient on an outpatient basis, the patient must be informed that they must be accompanied by a family member. In addition there must be someone who can be with them for the next 24 hours.

7.1.7 The referring consultant should review a patient's response to ECT, mental state and any potential side-effects on at least a weekly basis

7.1.8 Patients receiving ECT should also be screened for cognitive impairment. If possible (depending on patient's mental state), cognitive functioning should be assessed before the first ECT treatment and monitored weekly during treatment, and then at the end of a course of treatment using the standardized MMSE

7.1.9 It is the responsibility of the referring team to discuss whether unilateral ECT may be more appropriate, taking into account clinical indication and patient preference

7.2 **Psychiatrist delivering ECT Shall:**

7.2.1 Following the guidelines for the administration of ECT.

7.2.2 Responsible for administration the electrical stimulate through ECT machine.

7.2.3 Record details of the treatment on the patient's treatment file

7.3 **Anesthetist Shall:**

7.3.1 Clear patient fitness for anesthesia and co-signed the consent form.

7.3.2 Ensure that the Anesthesia Machine is functioning well before each ECT procedure.

7.3.3 Prepare and administer of anesthetic medication for clients.

7.3.4 Ensures that clients are fully recovered before discharge him from ECT unit.

7.4 ECT Nurse Shall:

7.4.1 Responsible for the Take overall management of the unit and care of the client.

7.4.2 Check the Standards in order to ensure the safe application of ECT.

7.4.3 Monitor and maintain the equipment and special supplies.

7.4.4 Indent drugs and disposable equipment.

7.4.5 Assist the anesthetist if required.

7.4.6 Monitor the client closely in the immediate period after transfer to the recovery area.

7.4.7 Report any adverse signs to the anesthetist.

7.5 **The Nurse Escorts Shall:**

7.5.1 Ensure that the ECT Checklist and other investigations are completed before ECT.

7.5.2 Ensure the referring teams have completed client preparation and that all necessary information accompanies the client. This include current ECT care plan.

7.5.3 Assist and support the ECT medical and nursing staff with direction from ECT staff.

7.5.4 Assist the Recovery Nurse in safely recovering the accompanied client after ECT. This requires knowledge of basic life support (BLS) and an understanding of ECT.

7.5.5 Monitor and record patient's vital signs.

7.5.6 Accompany the client until they are satisfied that the effects of the anesthetic and ECT are minimal. Ideally, the Escort Nurse stays with the client until returning to the ward.

7.6 **The Medical Orderly Shall:**

7.6.1 Assist in transferring the client from and to the wards with the help of the Escort Nurse.

7.6.2 Assist and support the ECT medical and nursing staff with direction from ECT staff.

7.6.3 Clean the equipment and getting the client ready for the ECT procedure.

7.6.4 Manage the waiting area and organize the flow of client to treatment room.

7.7 Electroconvulsive Therapy (ECT) Team Shall:

7.7.1 Work effectively as a multi-disciplinary team.

7.7.2 Maintain a line management structure with clear lines of accountability within the Unit.

7.7.3 Conduct and maintain regular multidisciplinary team meetings for clinical matters, policy, and administration.

7.7.4 Ensure that the roles and responsibilities of unit staff are clearly defined.

7.7.5 Take an active role in audit, academic teaching and development of evidence-based best practice of ECT.

7.8 The Biomedical Staff Shall:

7.8.1 Ensure that the output and electrical safety of the ECT machine are inspected by the manufacturers every six months and by the Biomedical Department for Maintenance annually.

7.8.2 Check the ECT electrodes visually every week for integrity of their insulation and wiring with the ECT nurse-in-charge.

7.8.3 Ensure that resuscitation equipment is checked weekly by the ECT Senior Nurse and serviced by the manufacturer.

8. Document History and Version Control Table

Document History and Version Control			
Version	**Description of Amendment**	**Author**	**Review Date**
01	Initial Release	Ahmed Khalid Al Subhi	February 2021
02	Vers02	Badriya AL Ghammari	
Written by	**Reviewed by**	**Approved by**	
Badriya AL Ghammari	Dr. Said ALKaabi	Dr. Bader ALHabsi	

9. Related Documents

9.1 Appendix 1. Protocol for Energy Levels

9.2 Appendix 2Pre –selected dosing table

9.3 Appendix 3. ECT Chart.

9.4 Appendix 4. ECT Checklist.

9.5 Appendix 5. ECT Consent.

9.6 Appendix 6. High Risk Cons

9.7 Appendix 7. Audit Tool.

9.8 Appendix 8. Document Request Form.

9.9 Appendix 9. Document Validation Checklist

10. References

Title of book/journal/articles/website	Author	Year of Publication	Page
The Practice of Electroconvulsive Therapy	Richard D. Weiner	2000	
The ECT Handbook	Scott. Allan	2005	
Guideline on the use of electroconvulsive therapy	National institute for clinical excellence	2003	
Quality network in-client CAMHS service standards	Worrall A O'Herlihy A Palmer L	2003	
Auditing Electroconvulsive therapy	Duffett R Lelliott p	1998	
Electroconvulsive therapy: systemic review and meta-analysis of efficacy and safety in depressive disorder	The UK ECT review group	2003	799-808
Health and safety Act	UK Government	1974	

The ECT Handbook	Royal College of Psychiatrists' Special Committee on ECT	1995	
National Audit of Electroconvulsive Therapy (ECT) in Scotland	CRAG Working Group on Mental Illness	2000	

11. Appendices

11.1 Appendix 1. PROTOCOL For Energy Levels-*Titration table for use with optimized and full spECTrum dosing parameter sets /100 Joule titration –spECTrum Q (1.0 ms Pulse width)*

Titration		**50% above or 1.5 x ST (BL or BF)**		**100% above or 2 x ST (BL or BF)**		**150% above or 2.5 x ST (BL or BF)**	
Stimulus	**1**						
Freq	20 HZ	Freq	20 HZ	Freq	20 HZ	Freq	25 HZ
PW	1.0 ms	PW	1.0 ms	PW	1.0 ms	PW	1.0 ms
Dur	1.5 s	Dur	2.0 s	Dur	3.0 s	Dur	3.0 s
Charge	28.0 mC	Charge	64.0 mC	Charge	96.0 mC	Charge	120.0 mC
Stimulus	**2**						
Freq	20 HZ	Freq	20 HZ	Freq	20 HZ	Freq	25 HZ
PW	1.0 ms	PW	1.0 ms	PW	1.0 ms	PW	1.0 ms
Dur	3.0 s	Dur	4.5 s	Dur	6.0 s	Dur	6.0 s
Charge	96.0 mC	Charge	144.0 mC	Charge	192.0 mC	Charge	240.0 mC
Stimulus	**3**						
Freq	20 HZ	Freq	25 HZ	Freq	30 HZ	Freq	40 HZ
PW	1.0 ms	PW	1.0 ms	PW	1.0 ms	PW	1.0 ms
Dur	6.0 s	Dur	7.0 s	Dur	8.0 s	Dur	7.5 s
Charge	**192**.0 mC	Charge	280.0 mC	Charge	384.0 mC	Charge	480.0 mC
Stimulus	**4**						
Freq	30 HZ	Freq	45 HZ				
PW	1.0 ms	PW	1.0 ms				
Dur	8.0 s	Dur	8.0 s				
Charge	384.0 mC	Charge	576.0 mC				
Stimulus	**5**					***Note :** Stimulus parameters assume 800 mA and are frequency (HZ), plus width (ms) and train duration (s)	
Freq	45 HZ						
PW	1.0 ms						
Dur	8.0 s						
Charge	576.0 mC						

11.2 Appendix 02 : PRE-SELECTED DOSING TABLES FOR USE WITH OPTIMIZED AND FUL SPECTRUM DOSING PARAMETER SETS

PRE-SELECTED DOSING TABLES -100/200 JOULE SPECTRUM Q (CURRENT IS 800 MA)

(Numbers in parentheses are average stimulus thresholds)

Gender &age		**50% or 1.5 x ST**	**100% or 2 x ST**	**150% or 2.5 x ST**
Female under 50	1.0 ms BL or BF (80 mc)	20 Hz, 3.75 s , 120 mC	20 Hz, 5 s , 160 mC	20 Hz, 6.5 s , 208.0 mC
Female 50 and older	1.0 ms BL or BF (120 mc)	20 Hz, 5.5 s , 176.0 mC	20 Hz, 7.5 s , 240.0 mC	25 Hz, 8 s , 320.0 mC
Male under 50	1.0 ms BL or BF (120 mc)	20 Hz, 5.5 s , 176.0 mC	20 Hz, 7.5 s , 240.0 mC	25 Hz, 8 s , 320.0 mC
Male 50 and older	1.0 ms BL or BF (160 mc)	20 Hz, 7.5 s , 240.0 mC	25 Hz, 8 s , 320.0 mC	30 Hz, 8 s , 384.0 mC

***Note**: This table used for special difficult cases*

11.3**Appendix 3. ECT Chart**

SULTANATE OF OMAN MINISTRY OF HEALTH DOCUMENT CODE: NSS - 04 DATE CREATED: 15/06/2011 REVISED: 14/07/2013 DATE TO BE REVIEWED: 15/07/2015 DEVOLOPED BY: CQI APPROVED BY : NSG AFFAIRS DEPT	AL- MASARRA HOSPITAL NURSING AFFAIRS DEPARTMENT CLINICAL NURSING SERVICES SECTION ECT CHART	PATIENT STICKER

Client had previous ECT? ☐ YES ☐ NO

NURSES PART									ANESTHETIST PART		PSYCHIATRIST PART			
No.	Date	Time	Vital Signs Shift	T	P	R	BP	Weight	Anesthetists Notes	Sign.	No. of ECT	Response	Sign. of Psychiatrist	Remarks
			N											
			M											
			N											
			M											
			N											
			M											
			N											
			M											
			N											
			M											
			N											
			M											

11.4 Appendix 4. Pre and post ECT Checklist

MINISTRY OF HEALTH SULTANATE OF OMAN DOCUMENT CODE: NSS-05 DATE CREATED: 01/06/2012, Rev:14/07/2013 DATE TO BE REVIEWED: 14/07/2015 DEVELOPED BY: NSG CQI APPROVED BY: NSG AFFAIRS	AL MASARRA HOSPITAL NURSING AFFAIRS DEPARTMENT CLINICAL NURSING SERVICES SECTION PRE AND POST ECT CHECKLIST	PATIENT'S STICKER

WARD/DEPT: DATE: NO. OF ECT:

S.NO.	PRE ECT CHECK LIST	YES	NO	REMARKS
1.	Psychiatrist written order			
2.	Written Consent			
3.	Physical examination & Lab investigations done			
4.	X-ray chest/scull & EEG/ECG done			
5.	Identification Band applied			
6.	Eye glasses /contact lenses if any removed			
7.	NPO from midnight			
8.	Artificial dentures if any removed			
9.	Any loose tooth			
10.	Ornaments /Jewelry removed			
11.	Nail Polish and lipstick removed.			
12.	Bowel & Bladder emptied			
13.	Any SOS/ sedation received after 12 midnight			
14.	Suffering with any medical problems			
15.	Weight checked.			

Signature of escorting staff handing over:
Date & Time:

Signature of ECT staff receiving the client:
Date & Time:

TO BE ACCOMPLISHED ONLY BY ECT STAFF.

POST ECT CHECK LIST

TIME	VITAL SIGNS	PULSE	RESP	BP	REMARKS
		YES	NO		
1	Vital signs within normal limits.				
2	Patient alert /responding to verbal commands.				
3	Reviewed by anesthetist and advised to shift the client to the ward.				

PATIENT HANDED OVER TO WARD STAFF UPON RECOVERY AT:

Name and Signature of
Recovery ECT Staff Handing Over

Name and Signature of
Escorting Staff Receiving the Client

11.5**Appendix 5. ECT Consent**

Patient's label

Electroconvulsive Therapy (ECT) consent form

Date: ---------- ----------

1. Patient Name ----------I, the undersigned, understand the potential benefits as well as the potential risks involved in treatment of my diagnosis by means of ECT.
2. I acknowledge that Dr. ---------- has explained the purpose of the procedure, the risks/benefits of the procedure, the alternatives with the risks and benefits and the possibility of complications.
   I hereby give my consent and authorize and request the staff of Al Masarra Hospital to give a series of ECT treatments to me. My doctor intends to begin the treatment course with one of the following (check one):
   - Unilateral treatments.
   - Bilateral treatments.

   The lead placement may be altered during the treatment series based on the clinical response

3. The indications of ECT have been explained to me in a manner that I understand. These include psychiatric disorders such as major depression, bipolar disorder, schizophrenia, catatonia and other conditions as explained by the provider.

4. The benefits and likelihood of success of ECT have been explained to me in a manner that I understand. These include improvement of mood and psychiatric condition. ECT has been shown to be a highly effective treatment.

5. The major risks and complications of ECT have been explained to me in a manner that I understand. These may include such items as failure to obtain the desired result, discomfort, injury, need for additional treatment(s) and death. Additional risks include:
   - Some patients have difficulty forming new memories while getting ECT which, once ECT is stopped, should resolve
   - Memory difficulty for the period surrounding the treatment is to be expected
   - Some of patients experience some degree of permanent loss of memories around the time of treatment, although many of those lost memories may return
   - A small percentage (1/200) of patients report severe problems in memory that persist
   - Myocardial infarct (heart attack) or stroke are rare
   - Dislocations or bone fractures are extremely rare
   - Risk of damage to fragile teeth

6. The reasonable alternatives, including major risks, benefits, and/or side effects, have been explained to me in a manner I understand. These include:

Alternatives	Major Risks, and Side Effects
Not undergoing procedure listed above	Possible progression of disease, no improvements in symptoms or condition, possible death. Benefits include not incurring risks associated with the above.
Medication	A non-invasive method that may not effectively treat the psychiatric condition with possible 6-8 weeks to achieve the desired outcome and with potential side effects such as orthostatic hypotension and cardiac arrhythmias. Benefits include not incurring risks associated with the procedure.
Psychotherapy	A non-invasive method which is most effective when paired with medication over time and may not effectively treat the severe psychiatric condition. Benefits include not incurring risks associated with the procedure.

7. During the procedure, the provider may become aware of conditions which were not apparent before the start of the procedure. I consent to additional or different operations or procedures the provider considers necessary or appropriate to diagnose, treat, or cure such conditions.

8. Due to the risk of confusion and memory loss, it is important to avoid driving and making important personal or business decisions during the ECT course. After the acute treatment course, there will be a convalescence period of approximately 1 to 3 weeks. During this period, it is important to continue refraining from these activities until advised otherwise by the treating psychiatrist.

9. By signing below I agree:
    - That a provider has explained and answered all of my questions related to ECT.
    - If I have further questions, I have the right to have those questions answered.
    - That no guarantees were made concerning the outcome, as the practice of medicine and psychiatry is not an exact science.
    - To have ECT.
    - That I have identified to a provider any restrictions on the sharing of information learned from the ECT.
    - I have not given up my right to refuse treatment at any time.
    - That I am entitled to a signed copy of this consent form

Patient Signature:_____ Date _____
IF THE PATIENT IS UNABLE TO CONSENT, Consent of next of kin or the legally authorized representative Full Name: _____ Date _____ (Relationship/Title)_____ Signature _____
Psychiatric name : _____ Time : _____ Signature / stamp _____ Date _____
Anesthetist name: _____ Time _____ Signature and stamp of anesthetist _____ Date _____

11.6 Appendix 6. ECT consent Arabic

MINISTRY OF HEALTH وزارة الصحة
AL MASARRA HOSPITAL مستشفى المسرة

Patient's label

استمارة الموافقة على العلاج بالصدمات الكهربائية (ECT)

التاريخ ----------

1- اقر أنا ---------- صلة القرابة / ----------
الموقع ادناه بأن الطبيب المعالج ----------قد قام بشرح الهدف من العلاج والفوائد والمخاطر والمضاعفات التي تنتج من العلاج بالصدمات الكهربائية .
وأمنح بهذا موافقتي وأطلب من الطبيب المعالج في مستشفى المسرة تقديم جلسات العلاج بالصدمات الكهربائية لـ ----------
،وقد تكون بواحدة من هذه الطرق (حدد واحدًا):

- ☐ علاجات أحادية الجانب.
- ☐ العلاجات الثنائية.

قد يتم تغيير موضع وصلة الجهاز أثناء جلسات العلاج بناءً على الاستجابة السريرية.

2- تم شرح أسباب العلاج بالصدمات الكهربائية بطريقة واضحة . وتشمل هذه الاضطرابات النفسية مثل الاكتئاب الشديد ، والاضطراب ثنائي القطب ، والفصام ، وغيرها من الحالات التي أوضحها الطبيب .

3- تم شرح فوائد العلاج بالصدمات الكهربائية واحتمالية نجاحها بطريقة واضحة . وتشمل تحسين المزاج والحالة النفسية. لقد اثبت علمياً أن العلاج بالصدمات الكهربائية هو علاج فعال للغاية.

4- تم شرح المخاطر والمضاعفات الرئيسية للعلاج بالصدمات الكهربائية بطريقة مفهومه. وقد تشمل المضاعفات/المخاطر مثل:

- الفشل في الحصول على النتيجة المرجوة ، والإصابات ،و الحاجة إلى علاجات إضافية.
- من المتوقع حدوث فقدان مؤقت للذاكرة خلال فترة العلاج وغالبا ما تعود الذاكرة بعد توقف جلسات العلاج.
- من المتوقع ان يعاني بعض المرضى من درجة معينة من فقدان دائم للذاكرة خلال فترة العلاج ، على الرغم من أن العديد من تلك الذكريات المفقودة قد تعود. نسبة بسيطة (200/1) من المرضى أبلغوا عن مشاكل خطيرة في الذاكرة.
- النوبة القلبية أو السكتة الدماغية من المضاعفات النادرة
- كسور العظام نادرة للغاية
- خطر تلف الأسنان الهشة
- في حالات نادرة جدا قد تؤدي المضاعفات الى الوفاة بنسبة(100000/2)
- مضاعافات ادوية التخدير

5- تم شرح البدائل لعلاج بالصدمات الكهربائية ، بما في ذلك المخاطر و / أو الفوائد و / أو الاعراض الجانبية ، بطريقة أفهمها. وتشمل هذه:

البدائل العلاجية	الفوائد و الاعراض الجانبية
عدم تلقي العلاج بالصدمات الكهربائية	عدم حدوث تحسن في الأعراض أو الحالة ، وربما الوفاة المحتمل بسبب عدم العلاج . تشمل الفوائد عدم تكبد المخاطر المرتبطة بما ورد أعلاه.
الدواء	الادوية قد لا تعالج اوتؤثر على الحالة النفسية بشكل فعال مع احتمال احتياج 6-8 أسابيع لتحقيق النتيجة المرجوة بالاضافة الى الآثار الجانبية المحتملة مثل انخفاض ضغط الدم الانتصابي وعدم انتظام ضربات القلب. الفوائد تشمل عدم تحمل المخاطرالمرتبطة بالإجراء.
العلاج النفسي	قد تكون أكثر فاعلية عند إقرانها بالأدوية بمرور الوقت وقد لا تعالج بشكل فعال الحالة النفسية الشديدة. الفوائد تشمل عدم تحمل المخاطر المرتبطة بالإجراء.

6- أثناء العلاج بالصدمات الكهربائية قد يلاحظ الطبيب وجود اعراض او مضاعفات لم تكن واضحة قبل بدء العلاج. أوافق على اجراء إجراءات إضافية أو مختلفة يراها الطبيب ضروريًة أو مناسبة لتشخيص او علاج مثل هذه الاعراض والمضاعفات .

7- نتيجة لخطر الارتباك وفقدان الذاكرة ، يجب تجنب القيادة واتخاذ قرارات شخصية أثناء فترة العلاج بالصدمات الكهربائية. وبعد الانتهاء من فترة العلاج، من المهم الاستمرار في الامتناع عن بعض الأنشطة خلال هذه الفترة يحددها الطبيب النفسي المعالج.

8- بالتوقيع أدناه أوافق على:

- **الموافقة على بدء العلاج بالصدمات الكهربائية .**
- **أن الطبيب المعالج قد أوضح وأجاب على جميع أسئلتي المتعلقة بالصدمات الكهربائية.**
- **انه لدي الحق في الحصول على اجابات على أي اسئلة اضافية.**
- **أنه لم يتم تقديم أي ضمانات فيما يتعلق بنتيجة العلاج بالصدمات الكهربائية.**
- **انه لدي الحق في رفض العلاج في أي وقت.**
- **انه لدي الحق في الحصول على نسخة موقعة من نموذج الموافقة**

توقيع المريض: ----------التاريخ:----------
إذا كان المريض غير قادر على الموافقة. موافقة أقرب الأقارب أو الممثل المفوض قانونًا **الاسم :----------الصلة----------البطاقة----------** **(العنوان)---------- ، التاريخ: ----------** **التوقيع :----------الوقت :----------**
اسم الطبيب المعالج :----------التاريخ ---------- **توقيع / ختم الطبيب :----------الوقت :----------**
اسم طبيب التخدير: ----------التاريخ ---------- **توقيع / ختم الطبيب: ----------الوقت :----------**

11.7 Appendix 7. High Risk Consent

SULTANATE OF OMAN
MINISTRY OF HEALTH

CONSENT FORM
(Written Expressed)
SURGICAL / SPECIAL PROCEDURES

PATIENT ID STICKER

NAME _____
PATIENT ID _____
AGE _____ **SEX** _____
NATIONALITY _____
CONTACT No.

SURGICAL / SPECIAL PROCEDURE _____
(Please specify site and side where applicable)

A. For Patient / Next of kin

I.....hereby give this written consent / permission for the surgical operation / special procedure on myself / my relative ..... Relationship.....
To be done under Sedation / Local / Regional / General Anaesthesia by Ministry of Health's permanent or authorized visiting doctors and/or their assistants. The nature of treatment, it's purpose, effects, possible risks, and alternatives of this surgical operation/special procedure have been explained to me by Dr.....

I also agree that the doctor may proceed to treat the complications which may arise and also agree onto the performance of any operative procedure found necessary and clinically justifiable during the course of the operation / procedure. No assurance has been given to me that the operation/procedure will be performed by any particular doctor.

I do also authorize the hospital to use their discretion in the disposal of my removed tissues or organs.

I have read and understood the above.

أ- للمريض / ولي أمره

أنا ..... أتقدم بهذه الموافقة / الإذن الكتابي لإجراء عملية جراحية / إجراء خاص لي/ لقريبي ..... صلة قرابته ..... بي ..... تحت التخدير الموضعي / الجزئي / العام ، بواسطة الأطباء الدائمين بوزارة الصحة أو الأطباء الزائرين المخولين أو مساعديهم. وقد شرح لي د/ ..... طبيعة العلاج وأهدافه وتأثيراته ومخاطره المحتملة وبدائل هذه العملية الجراحية / الإجراء الخاص.كما أوافق أيضا على أن يقوم الطبيب بمعالجة كافة المضاعفات التي ربما تحدث ، وأوافق أيضا على عمل أي إجراء جراحي تتبين ضرورته ويكون مبررا إكلينيكيا أثناء إجراء العملية / الإجراء الخاص. لم أعطى اى ضمانات بأن العملية / الإجراء الجراحي سيتم تنفيذها / تنفيذه بواسطة أي طبيب بعينه ، كما أفوض المستشفى في التصرف بحرية فيما يختص بالتخلص من الأنسجة أو الأعضاء المستأصلة أثناء العملية.
لقد اطلعت على ما جاء أعلاه وفهمته

Signature & Name (Patient/Next of Kin) _____ **الاسم والتوقيع (المريض / ولي أمره)**
Date _____ التاريخ :
Time _____ الوقت:

B. For Doctors (*Concerned specialty performing the surgical / special procedure*)

I confirm that I have pre-operatively explained the nature, purpose, effects, possible risks, and alternatives to this surigcal / special procedure to the above signatory.

Date_____
Time_____

_____
Signature & Stamp ***(Doctor)***

C. **For Witness** (*Hospital Employee preferably Nursing staff*)

I am witness to the fact that the doctor above has explained in details about the proposed surgical / special procedure to the patient/next of kin, and that consent has been willfully offered by the patient/next of kin.

Date_____
Time_____

_____
Signature & Staff No.

D. **For Anaesthetist**

I confirm that I have pre-operatively explained the nature, purpose, effects, and possible risks of Anaesthesia as such, or from the associated medical conditions.

Date_____
Time_____

_____
Signature and Stamp ***(Anaesthetist)***

HP-152

11.8 Appendix 8. ECT Audit Tool

Department: _____ **Date: _____**

S.N	Audit process	Standard/Criteria	Yes	Partial	No	N/A	Comment
1.	Observation Interview Document review	Are clients cleared by multidisciplinary team such as psychiatrist, anesthetist, dentist and physician before starting ECT?					
2.	Interview	Staff has a good knowledge and can identify and enumerate the following with ease and accuracy: ● Definition of Electroconvulsive Therapy (ECT).					
		● Purpose and indication of ECT.					
		● Contraindications of ECT.					
		● ECT complications.					
		● Awareness about anesthesia medications.					
		● Safety precaution.					
3.	Observation Interview Documentation Review	**Identification of the pretreatment procedure for administrating ECT**					
		● Checks doctor's order for ECT.					
		● Anesthesia, Physician & Dental pre-checkup done.					
		● ECG, chest X-ray done.					

		● Checks informed consent.					
		● Holds medications that affect the procedure.					
		● Monitors patient vital signs.					
		● Ensures that client is NPO (6-8 hrs.)					
		● Pre-checklist documented.					
3	Interview Observation Documentation review	**Before starting the procedure:**					
		● Ensures correct client.					
		● Explains procedure to the client.					
		● Checks patient vital signs.					
		● Reassures client about treatment.					
		● Prepares client physically for procedure.					
		● Cannula safely inserted.					
4	Observation Interview	**During ECT procedure:**					
		● Connects patient to the monitor and EEG leads.					
		● Inserts mouth gag.					
		● Protects upper and lower extremities during seizure.					
		● Observes clients for fits.					
		● Raises side rails up and keeps patient on close observation.					
5	Interview Observation Document	**Post ECT Procedure:**					
		● Monitors vital signs.					
		● Checks patient for any post ECT complications.					

	review	• ECT procedure documented.					
6	Interview Document review	Are all doctors and staff aware and understand the electroconvulsive therapy policy and procedure?					
7	Observation Document review	Is the scheduled maintenance program for the ECT machine and anesthesia machine regular in accordance with the manufacturer's recommendations?					
8	Observation Document review	Is the ECT equipment, i.e. defibrillator, checked regularly by maintenance team?					

11.9 Appendix 9. Document Request Form

Document Request Form

Section A: Completed by Document Requester

1. Requester Details

Name	Badriya Al Ghammari	Date of Request	January 2023
Institute	Al Masarra Hospital	Mobile	–
Department	ECT Department	Email	–

The Purpose of Request

• Develop New Document	✓ Modification of Document	• Cancelling of Document

1. Document Information

Document Title	Policy and Procedure of Electroconvulsive Therapy (ECT)
Document Code	AMRH/ECT/P&P/001/Vers.02

Section B: Completed by Document Controller

✓ Approved	• Cancelled	• Forward To:……..

Comment and Recommendation: Proceed with the document

Name	Kunooz Al Balushi	Date	Feb 2023
Signature		Stamp	

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QUALITY MANAGEMENT DEPT.
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11.10 **Appendix10. Document Validation Checklist**

Document Validation Checklist					
Document Title: Policy and Procedure of roconvulsive Therapy (ECT)		**Document Code:** AMRH/ECT/P&P/001/Vers.02			
No	Criteria	**Meets the Criteria**			**Comments**
		Yes	**No**	**N/A**	
1.	**Approved format used**				
1.1	Clear title – Clear Applicability	✓			
1.2	Index number stated	✓			
1.3	Header/ Footer complete	✓			
1.4	Accurate page numbering	✓			
1.5	Involved departments contributed	✓			
1.6	Involved personnel signature /approval	✓			
1.7	Clear Stamp	✓			
2.	**Document Content**				
2.1	Clear purpose and scope	✓			
2.2	Clear definitions	✓			
2.3	Clear policy statements (if any)	✓			
3.	**Well defined procedures and steps**				
3.1	Procedures in orderly manner	✓			
3.2	Procedure define personnel to carry out step	✓			
3.3	Procedures define the use of relevant forms	✓			
3.4	Procedures to define flowchart		✓		
3.5	Responsibilities are clearly defined	✓			
3.6	Necessary forms and equipment are listed	✓			
3.7	Forms are numbered	✓			
3.8	References are clearly stated	✓			
4.	**General Criteria**				
4.1	Policy is adherent to MOH rules and regulations	✓			
4.2	Policy within hospital/department scope	✓			
4.3	Relevant policies are reviewed	✓			
4.4	Items numbering is well outlined	✓			
4.5	Used of approved font type and size	✓			
4.6	Language is clear, understood and well structured	✓			
Recommendations	✓ For implementation ..... More revision ..... To be cancelled				
Reviewed by: Kumar Dr Rakesh		**Reviewed by:** Maria Claudia Balk