

**University of Baghdad/ College of Nursing
Psychiatric Mental Health Nursing Department
Master Programme/ Specialty
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Nursing Care in ECT

Introduction

- ECT is a physical therapy in which with the help of electrodes, electrical current is passed to the brain to produce generalized seizures.
- Modified electroconvulsive therapy (ECT) is a controlled medical procedure in which a seizure is induced in an anaesthetized patient to produce a therapeutic effect.
- Electroconvulsive therapy (ECT) is a highly technical procedure requiring a team that consists of an anaesthetist, a psychiatrist, psychiatric nurses, and recovery nurses.
- Psychiatric nurses have an important role in caring patients who receive ECT.

Indications for ECT

ECT is the most acutely effective treatment available for affective disorders and is more effective than antidepressant drugs.

ECT may be considered as a *primary treatment (or first-line treatment)* for persons exhibiting syndromes such as: severe major depression, acute mania, mood disorders with psychotic features, and catatonia.

1. Severe depression
2. Acute mania
3. Mood disorders with psychotic features
4. Intolerance to side effects of medication or other treatments
5. Deterioration in condition, or appearance of suicidality or pronounced lethargy.
6. Acute catatonia

Contra-indications

- Contraindications to ECT include brain tumours, space-occupying lesions, and other brain diseases that cause increased intracranial pressure.

Nursing Care in ECT

Electroconvulsive therapy is treated like a minor surgical procedure that requires preoperative preparation and postoperative care. There are four components of nursing care in ECT

- Providing educational and emotional support
- Pre-treatment planning and assessment
- Preparing and monitoring the patient during the actual procedure
- Post-treatment care and evaluation

Providing Educational and emotional support

- Explain the procedure to the patient
- Obtain an informed consent from the patient and the carer.
- Respond to patient's concerns and feelings.
- Educate the patient concerning the procedure and explain to the patient the necessary tasks associated with ECT.
- Initiate education interventions based on knowledge deficits.

Pre-treatment Nursing care

- Preparation of treatment suite for the ECT procedure
- An adjustable height stretcher trolley

- Complete the pre-treatment check list.
- The patient's identity is checked and the patient wears an identity bracelet.
- Ensure safekeeping of the patient's valuables.
- NPO for minimum 4 hours before treatment to prevent possible aspiration during anaesthesia.
- The patient's hair should be clean and dry to allow for electrode contact.
- Hairpins, bracelets, body piercing should be removed to avoid burns.
- The patient should be encouraged to pass urine before the treatment to avoid incontinence during the procedure.
- Prostheses, dentures, glasses, hearing aids, contact lenses, should be removed.
- Minimise anxiety through anxiety management techniques, ensuring short waiting time and offering reassurance and support.
- Standard practices should be practiced regarding general anaesthesia care.

Nursing Care during ECT Procedure

- Transfer the patient on a trolley from the waiting room to the ECT room on a well padded bed and placed in a comfortable dorsal position or supine position. A small pillow is placed under the lumbar curve.
- Apply ECG electrodes, BP cuff, and pulse oximetry sensor (not on same extremity as BP cuff).
- Give a short acting anaesthetic agent. Thiopental .25mg to .5 mg, IV and secoline (succinyl choline) 30-50 mg. The dose of drug may vary from patient to patient.
- Prepare EEG electrodes, per treatment specifications.
- Prepare scalp and stimulus ECT electrodes (unilateral vs. bilateral) and apply paste to electrodes.
- Support the shoulder and arms of the patient. Restraint the thigh with the help of a sheet.
- Hyperextension of the head with support to the chin.
- Administer oxygen
- Apply jelly to the electrodes
- Make the observations of the convulsions.
- The presence of initial tonic stage which lasts for 10-15 seconds followed by clonic stage which lasts for 25-30 sec then there is a phase of muscular relaxation with stertorous respiration ie flaccid stage.
- Do suction immediately
- Restore respiration by giving O2 if necessary.

Post-ECT Care

- Observe and record the vital parameters
- Place the patient on side lying position, clean the secretions
- Transfer the patient from recovery room. Record vital signs every 15 min for 30 min and once in every 30 min till the patient recover to the normal stage.
- Allow the patient to sleep for 30 min to one hour
- Reassure the client and reorient to the ward
- Allow the patient to have tea or any drinks
- Record the procedure

Equipment for ECT

- Treatment devices and supplies, including electrode paste and gel, gauze pads , saline, electroencephalogram electrodes and chart paper.
- Monitoring equipment including ECG and EEG electrodes

- BP cuffs, peripheral nerve stimulator and pulse oxymeter
- Stethoscope
- Reflex hammer
- Intravenous and venepuncture supplies
- Stretchers with firm mattress with side rails with the capacity of raising the head and foot end
- Bite blocks
- Suction device
- Ventilation equipment, including tubing , masks, Ambubag, oral airways , intubations equipment with an oxygen delivery system capable of providing positive- pressure oxygen
- Emergency and other medications as recommended by the anaesthesia staff
- Miscellaneous medications not supplied by anaesthesia staff for medical management during ECT such as midazolam, diazepam, thiopental sodium, glycopyrolate, succinyl choline etc.

Documentation

- Document using flow sheets or progress notes.
- Record the patient's vital signs and responses during the treatment sequence, recovery, and post-recovery.
- Document medications, stimulus parameter, seizure response and vital signs
- Assess and document the patient's physical and mental status and any behavioural changes or lack of such changes

Conclusion

Psychiatric nursing care for the electroconvulsive therapy (ECT) patient has evolved from a traditional supportive and adjunctive practice to the current practice of independent and collaborative nursing actions. The nurse's multifaceted role in ECT is enacted by providing education and support, performing pre-treatment assessments, monitoring the procedure, and observing and interpreting posttreatment patient responses.

Although in use for 70 years, ECT continues to attract controversy and there is considerable stigma associated with its use that often overshadows the empirical evidence for its effectiveness. One way to overcome this is for health professionals to be educated about contemporary ECT practice. Patients need to make informed decisions when consenting to ECT and this process can be influenced by preconceived ideas and scientific fact.

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