



ELECTRO-CONVULSIVE THERAPY (ECT)

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ELECTRO-CONVULSIVE THERAPY (ECT)

○ **Mode of Action**

- It is done through the passage of an electric current capable of inducing a generalized seizure activity in the brain.
- The mechanism of action is not clear, but ECT is one of the most efficient methods of treatment in psychiatry.
- It has the least complications when applied properly.





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- **Technique**
- • Thorough physical examination.
- • Patient is fasting and artificial dentures are removed. A mouth gag is applied to protect teeth and tongue.





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- • *Premedication and anesthesia:*
- - Atropine (0.5 mg I.M.) to protect the heart from parasympathetic overtone and reduce bronchial secretions.
- - Short acting anesthesia (e.g., thiopental I.V.), a sleeping dose is needed.
- - Muscle relaxant (e.g., succinylcholine) in full dose to minimize or prevent convulsions.





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- • *Application of electrodes:*
- 1- Bilateral (more effective): bifrontotemporal application of the electrodes.
- 2- Unilateral applied to non-dominant hemisphere (less cognitive side-effects).







INDICATIONS OF ECT

- 1- Major Depression.
- 2- Bipolar Mood Disorder.
- 3- Acute psychotic disorders:
 - Undifferentiated and brief psychotic disorders.
 - Acute delusional disorders.
- 4- Schizoaffective disorders.
- 5- Schizophrenia:
 - With catatonic symptoms.
 - With mood (depressive symptoms).
 - With acute exacerbation of symptoms.





ECT

- ***Contraindications (Relative Not Absolute)***
- 1 - Recent myocardial infarction.
- 2- Increased intracranial tension, cerebral aneurism or hemorrhage.
- 3- Extreme hypertension.
- 4- Fever or acute respiratory infection.
- 5- Significant arrhythmias.

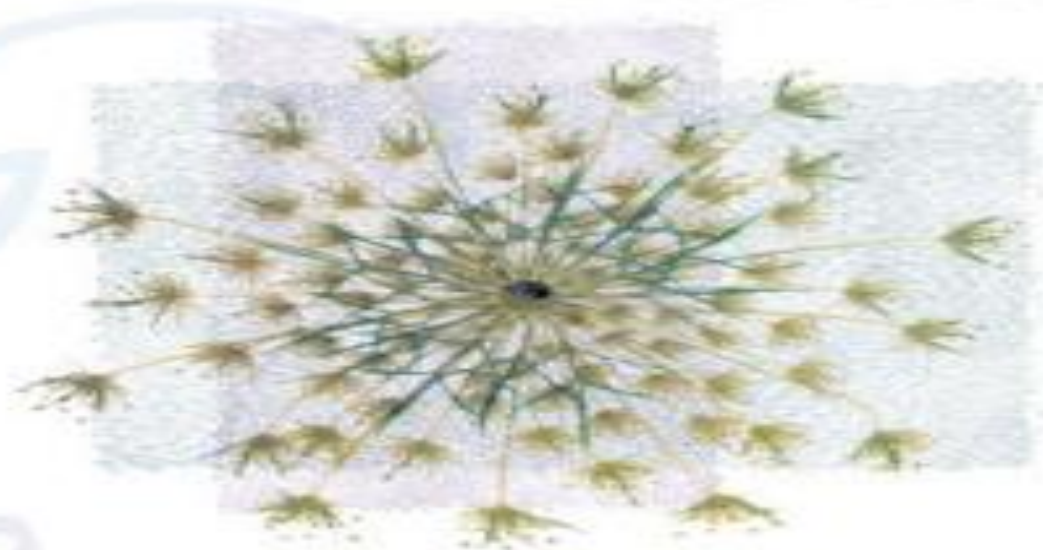


COMPLICATIONS OF ECT

- 1- Transient short-term memory loss and confusion.
- 2- Rare complication:
 - - Fractures or dislocations (if muscle relaxant is not adequately used).
 - - Myocardial infarction or arrhythmias.
 - - Miscarriage, if patient has threatened abortion.



HEALING THOUGHTS



Time is a healer.

Every sunrise brings the light
of hope and the promise of renewal.

-Mae Marie