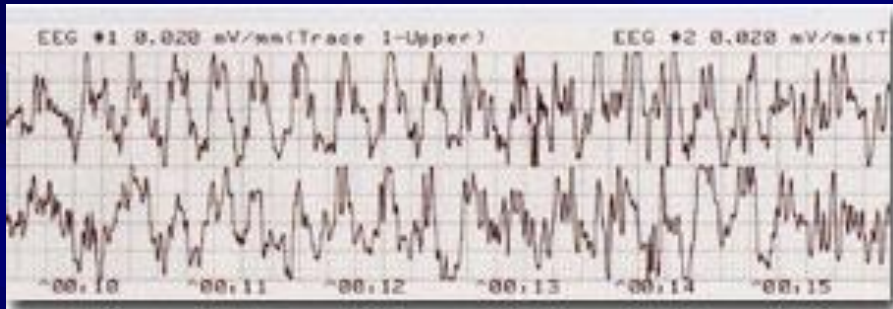
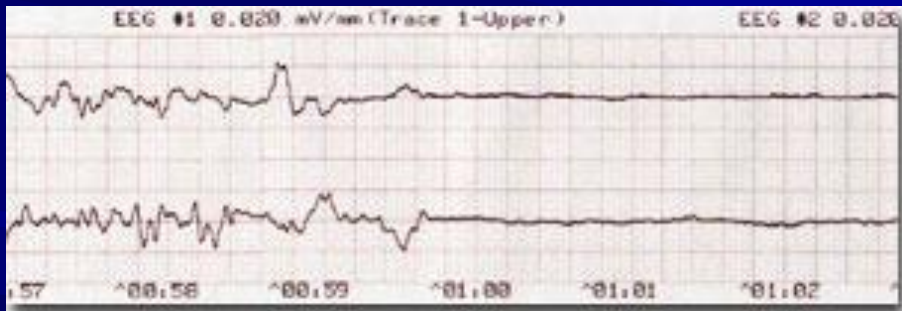


# EEG Monitoring

Beginning of Seizure



End of Seizure



- Post-ictal suppression
  - The fall in EEG amplitude at the end of the seizure
  - Has emerged as the only significant predictor of therapeutic outcome
- Seizure duration *per se* does not correlate with ECT outcome
  - Although seizures greater than 25 seconds are associated with better outcomes

# Pre-ECT Evaluation

- No “routine” pre-ECT medical evaluation should be required for all patients
- Detailed physical exam and neurological exam
  - Assess for presence of medical conditions or medications that increase risk of procedure
  - A collaborative approach between the ECT psychiatrist, medical consultants, and anesthesia providers is more meaningful than simply asking for “clearance” before ECT
  - Recommendations should be sought to optimize the patient’s medical status and/or to modify the treatment procedure to minimize medical risk

# Pre-ECT Evaluation

- Spine x-rays are not routinely required
- EEG or neuroimaging should be considered when other clinical information suggests that a relevant neurological disorder might be present
- The pre-ECT evaluation should document
  - Cognitive status
    - Evaluation of orientation and memory
    - More detailed neuropsychological assessment is useful in patients with pre-existing cognitive impairment or dementia
  - Capacity to engage in an informed consent process

# Informed Consent

- Full explanation of procedure in layman's terms
- Presentation of risks and potential benefits of treatment offered and alternatives
- Statement that patient may withdraw consent at any time and for any reason
- Patient and family are fully informed
- Written valid informed consent is signed
  - By patient
  - “Significant family member”
- Consent should be obtained before the beginning of each phase of treatment and periodically afterwards

# Informed Consent

- Ideally patient and family can see an ECT video
  - For education and unambiguous documentation of information presented

## Informed ECT for Patients and Families

with



Dr. Max Fink

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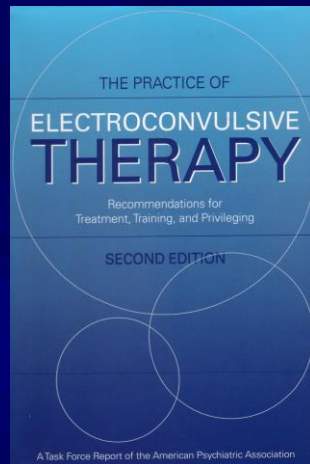
# Mechanism of Action

- Still largely unknown
- Two demonstrated neurobiological effects are the basis for interest
  - Hypercortisolemia
    - Accompanies melancholia and catatonia
      - Melancholia responsive to ECT > 90%
    - Reverses with effective ECT
    - Demonstrated using the Dexamethasone Suppression Test (DST) or Dexamethasone-CRH Test
      - Normal DST follows remission
      - Abnormal DST predicts relapse
  - Anatomic changes in animal trials using ECS
    - Neuronal sprouting without cell loss
    - Enhanced neurogenesis in the dentate gyrus

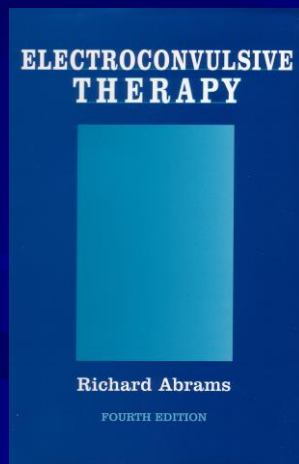
# ECT in Britain: *A Shameful State of Affairs*

*“If ECT is ever legislated against or falls into disuse it will not be because it is an ineffective or dangerous treatment; it will be because psychiatrists have failed to supervise and monitor its use adequately. It is not ECT which has brought psychiatry into disrepute. Psychiatry has done just that for ECT.”*

# Reference Texts



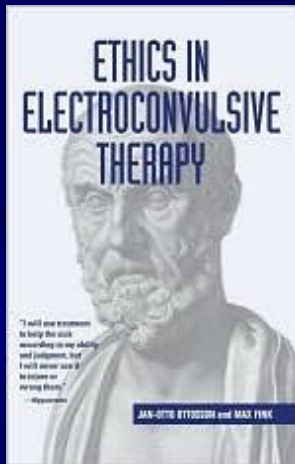
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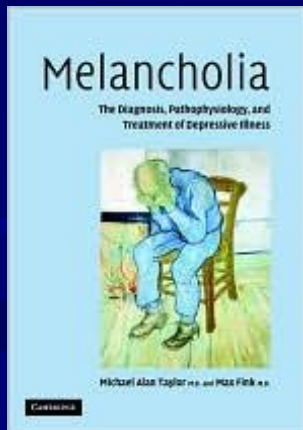
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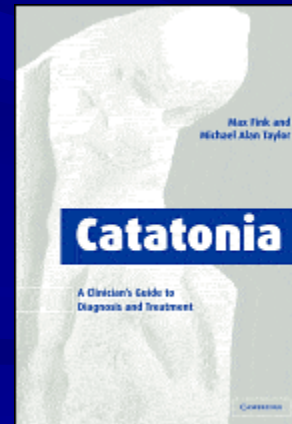
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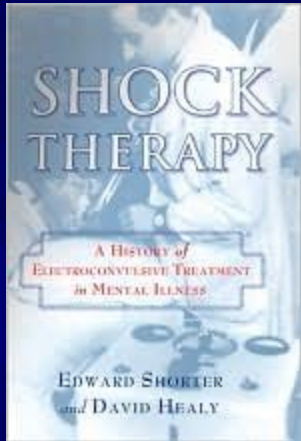


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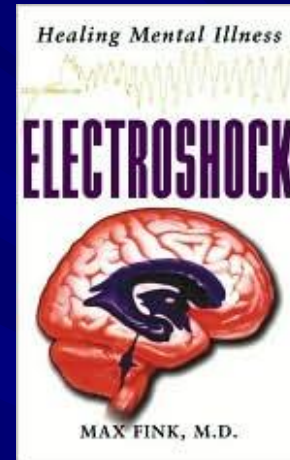


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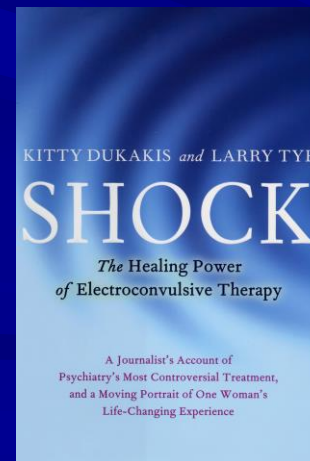
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# Posttest Question 1

ECT has demonstrated efficacy in the treatment of:

- A. Depressive Episodes
- B. Manic Episodes
- C. Catatonia
- D. Acute Psychotic Episodes
- E. All of the above

## Posttest Question 2

Methohexital is the preferred anesthetic agent for ECT because:

- A. It is relatively inexpensive
- B. It is only moderately anticonvulsant
- C. It has quick onset of action
- D. It has brief duration of action
- E. All of the above

## Posttest Question 3

Which best describes the role of the medical consultant in the pre-ECT evaluation?

- A. To provide clearance to undergo ECT
- B. To help optimize the patient's medical condition prior to ECT
- C. To tell the psychiatrist if ECT is appropriate for the patient
- D. To identify contraindications to ECT

# Posttest Question 4

Which is NOT true concerning the seizure during ECT?

- A. Should be monitored with EEG
- B. Should be monitored with EMG
- C. Cumulative seizure length during a course of ECT is closely correlated with clinical outcome
- D. Failure to elicit a seizure is associated with lack of efficacy
- E. Seizure threshold increases during the treatment course

# Posttest Question 5

Discovery of which of the following medical conditions in a patient being evaluated for ECT is most concerning?

- A. Type II Diabetes
- B. Recent Myocardial Infarction
- C. HIV/AIDS
- D. Psoriasis
- E. Epilepsy

# Posttest Answers

1. E
2. E
3. B
4. C
5. B