A Shocking Solution

Electroconvulsive Therapy (ECT) and Its Effectiveness on Depression and Mental Illness

A Brief History of ECT

- Manfred Sankel uses insulin to treat schizophrenia by causing seizure activity 1
- Ugo Cerletti uses electricity to produce seizure-like activity to help treat depression and schizophrenia 1,2
- Ladislaus J. von Meduna uses metrazol-induced convulsions to treat schizophrenia and other mental disorders 1


What?

- ECT works faster than antidepressants to relieve symptoms of depression 3,4
- ECT therapy is the most effective therapy for severe depression with efficacy rates of over 80% 3,5

How?

- Although the mechanism is still unclear, there are 2 popular theories:
  1. It increases cell proliferation and the production of new neurons 6
  2. It increases glutamate and GABA, two chemicals necessary for brain function 6

The Future

- There is ongoing research to understand the mechanisms behind ECT’s success
- Although there is a stigma associated with ECT, it is a viable treatment option for some patients

Based on an original article by Victoria Cook in BU Well Volume 3
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