

# 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<sup>1</sup>



1927

1934

Ugo Cerletti uses electricity to produce seizure-like activity to help treat depression and schizophrenia<sup>1,2</sup>



1938

Ladislaus J. von Meduna uses metrazol-induced convulsions to treat schizophrenia and other mental disorders<sup>1</sup>



### WHAT?

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



### How?

- Although the mechanism is still **unclear**, there are **2** popular theories:
  1. It increases cell proliferation and the production of new neurons<sup>3</sup>
  2. It increases glutamate and GABA, two chemicals necessary for brain function<sup>6</sup>



### 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

