The Effects of Deep Brain Stimulation on Obsessive-Compulsive Disorder

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Introduction

- OCD effects 2-3% of the United States, 1-2% of the world
- Comorbidities include depression, tics, eating disorders
- Treatment includes CBT, ERP, medications
- Optimal treatment helps only 35% of people reach "remission"

Deep Brain Stimulation

- Surgical procedure used for Parkinson’s disease, essential tremor since the 1980s
- Granted H.D.E status for OCD in 2009
- Progress made through trial-and-error programming across multiple years
- Very stringent qualifications:
  - Inclusion: YBOCS ≥ 28
  - 20 sessions of ERP
  - At least 3 SSRI trials
  - 1 month with benzo
  - 1 month on antipsychotic
- Exclusion: Psychotic disorders
  - Bipolar disorder
  - Active substance abuse
  - Active eating disorder
  - Active suicidality

Data taken from eight patients with the OCD clinic at CU Anschutz, participation ranges from 2-7 years. All adult patients.

Methods and Results

Data was taken from intervals of one month, three months, six months, one year, and two years. No patients were recruited for the purposes of this study with everyone already being patients with the clinic. Each programming session was proceeded with assessments, followed by therapy sessions throughout the week.

- YBOCS p < 0.05
- MADRS p < 0.05
- YMRS p = 0.372
- Q-LES-Q-SF p = 0.19

Quality of life showed improvement, albeit insignificant through analysis. YMRS scores showed no consistent improvement over two years.

Future Directions...

- Altruism within OCD patients
  - People with OCD regularly exhibit sensitive and empathetic tendencies towards other people as a result of being hyper-aware most of the time.
  - Further exploration into possible quality of life trends related to DBS
    - Qualitative interviews and data tracking
    - More in-depth investigation

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