

ITP is a bundle of axons which communicate bidirectionally orbitofrontal cortex with non-specific thalamic system. Similar neuro-pharmacological condition could be improved in obsessive compulsive disorder (OCD) by electrical stimulation of ITP.

Hypothesis: Electrical stimulation of ITP in patients with difficult to treat OCD will lessen more than 50% the symptoms of obsession and compulsion in accordance with specific scale and will not have side effects.

Patients and Methods: Four patients with OCD were evaluated and selected by a Scientific and Ethical Committee. Patients and relatives were informed about the procedure and psychiatric, neurophysiological and neuropsychological evaluations were performed prior to surgery. Four contact electrodes were bilaterally implanted in ITP by stereotactical system. Recruiting responses, DC-shift and MRI were obtained and confirming right placement. Continuous electrical stimulation under fixed parameters was carried out. Follow up was made every 3 months a long one year. A double-blind period was applied.

Statistical analysis was made according t-student and Wilcoxon test.

Results: Significant improvements were obtained in Yale Brown Obsessive Compulsive Scale and Global Assessment Functioning Scale. No side effects were observed.

Conclusion: Electrical stimulation of ITP Is useful and safe in the treatment of patients with OCD.