

Evaluation of the Efficacy of *Withania Somnifera* (Ashwagandha) Root Extract in Patients With Obsessive-Compulsive Disorder: A Randomized Double-Blind Placebo-Controlled Trial

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Abstract

Background: Obsessive-compulsive disorder (OCD) is a chronic psychiatric disorder that is causally linked to dysregulation of the serotonergic system. The aim of this study is to investigate the efficacy of *Withania somnifera* (*W. somnifera*) root extract as an adjunct therapy to standard OCD treatment.

Methods: Thirty patients with a confirmed diagnosis of OCD according to the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR) criteria participated in this randomized double-blind placebo-controlled trial and were randomly assigned to the treatment group (*W. somnifera* extract, 120mg/day; n=15) or the placebo group (n=15). All patients were under treatment with Selective Serotonin Re-uptake Inhibitors (SSRIs), and were instructed to take 4 capsules of the extract or placebo per day, preferably after meals, for a period of six weeks. The Yale-Brown Obsessive-Compulsive Scale (Y-BOCS) was used in order to assess the severity of OCD symptoms at baseline and at the end of the trial. Statistical analyses were performed using SPSS software and Y-BOCS values were presented as median and range (Min-Max).

Results: Comparison of the change in Y-BOCS score during the course of the trial revealed a significantly greater effect of *W. somnifera* (26 (14-40) [pre-treatment] versus 14 (4-40) [post-treatment]; change: -8 (-23 to 0)) versus placebo (18 (11-33) [pre-treatment] versus 16 (10-31) [post-treatment]; change: -2 (-4 to 0)) (P<0.001). The extract was safe and no adverse event was reported during the trial.

Conclusion: *W. somnifera* extract may be beneficial as a safe and effective adjunct to SSRIs in the treatment of OCD.

Keywords: Ashwagandha; Obsessive-compulsive disorder; Randomized controlled trial; Withania somnifera.

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