

## **Effect of ascorbic acid on mental depression drug therapy: Clinical study**

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### **Abstract**

Depression disorders are very common in clinical practice. Ascorbic acid is a cofactor in synthesis of noradrenaline from dopamine and serotonin from tryptophan. The aim of this work was to study the efficacy of ascorbic acid on antidepressant therapy. Clinical prospective double blind study is planned to investigate the effect of ascorbic acid on the mental depression therapy and the possible therapeutic interaction with the pharmacotherapy of the disease. It was applied on twenty two outpatients who were diagnosed according to diagnostic and statistical manual of mental disorders 4<sup>th</sup> edition; patients should have a base line Hamilton rating scale for depression. The patients were randomly assigned to receive tablet of ascorbic acid with antidepressant (Group A) and tablet of placebo with antidepressants (Group B) for eight weeks. All patients submitted to laboratory investigation, the complete blood analysis, lipid profile, liver function test, renal function tests, serum electrolytes and complete urine analysis before and at the end of trial. Ascorbic acid levels in plasma were measured by HPLC. Ascorbic acid with antidepressants significantly decreased the total Hamilton depression rating scale and total questionnaire. Whole laboratory investigation were normal and within the normal value. The main overall finding from this study is that ascorbic acid was therapeutically benefited with antidepressant in the treatment of depression and predicts a good response in treated patients using combined ascorbic acid with antidepressants to be well tolerated and effective in depressive symptoms. Finally, this clinical trial results recommend combining ascorbic acid with antidepressants therapy. A large scale trial is advised.

### **Biography**

Suhera M. Aburawi has completed her Ph.D. from Cairo University, Faculty of Pharmacy. Now, she is Professor in pharmacology and toxicology at University of Tripoli, Faculty of Pharmacy, Department of Pharmacology and Clinical Pharmacy. She has published 40 papers in journals and conferences.

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