Amantadine as an additive treatment in patients suffering from drug-resistant unipolar depression

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Abstract:
The paper describes the effect of amantadine addition to imipramine therapy in patients suffering from treatment-resistant unipolar depression who fulfilled DSM IV criteria for major (unipolar) depression. Fifty patients were enrolled in the study on the basis of their histories of illness and therapy. After a 2-week drug-free period, 25 subjects belonging to the first group were treated only with imipramine twice daily (100 mg/day) for 12 weeks, and 25 subjects belonging to the second group were treated with imipramine twice daily (100 mg/day) for 6 weeks and then amantadine was introduced (1.50 mg/day, twice daily) and administered jointly with imipramine for the successive 6 weeks. Hamilton Depression Rating Scale (HDRS) was used to assess the efficacy of antidepressant therapy. Imipramine did not change the HDRS score after 3, 6 or 12 weeks of treatment when compared with the washout (before treatment). The addition of amantadine to the classic antidepressant reduced HDRS scores after 6-week joint treatment. Moreover, the obtained pharmacokinetic data indicated that amantadine did not significantly influence the plasma concentration of imipramine and its metabolite desipramine in patients treated jointly with imipramine and amantadine, which suggests lack of a pharmacokinetic interaction. The obtained results indicate that joint therapy with an antidepressant and amantadine may be effective in treatment-resistant unipolar depression.

Key words: imipramine, amantadine, clinical and pharmacokinetic studies, therapy-resistant unipolar depression, humans