

Safety of Antidepressant Therapy in Parkinson's Disease (PD) Patients Treated with Rasagiline

Panisset M, Schwid S, Ondo W, Fitzer-Attas C, Chen JJ

Background: A rare side effect of serotonergic psychotropic drugs is serotonin toxicity (ST); combining drugs that influence intrasynaptic serotonin levels raises an additional theoretical concern.

Rasagiline, a potent, selective, and irreversible MAO-B inhibitor is indicated for the treatment of early and moderate-advanced PD.

Objective: To examine safety of concomitant rasagiline+antidepressant therapy during rasagiline trials, focusing on ST risk.

Methods: Fifteen major and minor ST-related adverse events (AEs) (fever, hypotension, hypertension, tachycardia, diarrhea, agitation, ataxia, confusion, emotional lability, myoclonus, nervousness, sleep disorder, dyspnea, hyperventilation, sweating) were assessed. For each AE a Fisher Exact 2-tailed test was used to compare the incidence rate (per 100 subjects) in the rasagiline+antidepressant group vs. rasagiline-only group. Possible ST cases (combination of 4 major or 3 major + 2 minor AEs) and terminations due to AEs were followed.

Results: Of 1361 patients given rasagiline, 316 also received an antidepressant for a median time of 367 days (range 1-3067 days). For most AEs, incidence rates were not statistically different ($P > .05$) for rasagiline+antidepressant vs no-antidepressant patients. Incidence rates were significantly higher for confusion (2.8 vs 1.6; $P = .03$), sleep disorder (10.2 vs 6.2; $P = .0002$), and dyspnea (2.9 vs 1.6; $P = .03$), all noted side effects of, and indications for antidepressant use. No cases meeting criteria for ST were observed under concomitant rasagiline+antidepressant use. ((How about in the rasagiline only group to show that these symptoms are common in PD) Terminations due to AEs were not greater in these patients.

Conclusions: Antidepressant therapy did not appear to increase ST-related AEs or discontinuations due to AEs in patients taking rasagiline. No specific cases of ST were identified. Our data suggests that rasagiline can be safely used with various antidepressants.