



Mindfulness: Exploring efficacious methods for constructing protective and resilient factors into the Neurophysiology of the Brain

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Abstract:

We have recently suggested that blockade of NMDA receptors by memantine could result in an antimanic and mood-stabilizing effect in treatment-resistant Bipolar Disorders (BD). Our group found suggestive evidence of mood-stabilizing actions in 40 BD patients in an unblinded, 12-month trial when added to stable, ongoing but inadequately effective standard treatments. Memantine as a monotherapy also has been reported to show beneficial effects in a few individual BD patients, including after discontinuation of lithium treatment. Finally, we published the results of a three-year naturalistic assessment of adding memantine to 30 treatment-resistant bipolar patients at the Lucio-Bini Mood Disorder Center in Rome. In this unblinded trial, memantine appeared to add substantial long-term benefits, for both depressive and mania-like (mania, hypomania) morbidity, in outpatients who had responded consistently unsatisfactorily to standard treatments for more than 3 years, until memantine (20–30 mg/day) was added clinically to otherwise stable regimens for another 3 years, during which patients improved progressively. Memantine showed marked, statistically significant decreases of duration of illness (total, manic and depressive illness, on average -74.2%), symptom severity scores (CGI-BP; -63.1%), duration of new episodes (-56.3%), and recurrence frequency

(episodes/year; -55.8%). These findings indicated impressive improvement in the duration and severity of both affective phases of the disorder, with a greater improvement of depression than mania, and evidence of decreased severity of mania indicated by shifting to hypomania. Subjects with previous rapid- (≥ 4 episodes/year) or continuous-cycling were particularly improved. The possible mechanism of mood stabilizing effect of memantine will be discussed.

Biography:

Gino Serra is a Psychiatrist and Full Professor of Pharmacology at the University of Sassari, Department of Biomedical Science. In 1979 he first suggested that potentiation of dopaminergic transmission in neurons arising in the substantia nigra/ventral-tegmental-area induced by repeated treatment with antidepressants plays an important role in their therapeutic effects. Recently, He suggested, and he and his collaborators developed preliminary clinical support for the proposal that memantine may exert beneficial, mood-stabilizing effects. Indeed, they have recently observed in 3 naturalistic clinical studies that memantine, as an augmenting agent, was associated with clinically substantial antimanic and sustained mood-stabilizing effects in otherwise treatment-resistant bipolar disorder patients, with excellent tolerability and safety.