

# Does oral administration of ketamine accelerate response to treatment in major depressive disorder? Results of a double-blind controlled trial



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## ABSTRACT

**Background:** Major depressive disorder (MDD) exerts a high health and financial burden on society. The conventional pharmacotherapies for MDD are partially effective and the response to medication often starts with some delay. There are recent reports of antidepressant effects for oral ketamine.

**Methods:** We employed a double-blind controlled trial to examine the time course of the therapeutic effect of ketamine when combined with the conventional administration of sertraline. A total of 81 patients participated in the study and were scored with the Hamilton Depression Rating Scale (HDRS) at baseline and at 2, 4 and 6 weeks after the start of the trial

**Results:** General linear model repeated measures demonstrated significant effect for time  $\times$  treatment interaction on the HDRS scores, with significant difference at all time points post treatment. Early improvement was significantly greater in the ketamine group (85.4%) compared to the placebo group (42.5%). We did not observe any side effects for ketamine administration. **Limitations:** Our follow up was limited to 6 weeks post initiation of treatment and cannot reveal the potential long-term adverse effects of oral ketamine and the sustainability of its benefit.

**Conclusion:** Altogether, our results suggest that oral ketamine may be considered as suitable adjuvant to sertraline in relieving depressive symptoms.