

P03-437

A PRELIMINARY NATURALISTIC STUDY OF LOW-DOSE KETAMINE FOR DEPRESSION AND SUICIDE IDEATION IN THE EMERGENCY DEPARTMENT

G.L. Larkin¹, A.L. Beautrais¹, R.R. Turelli¹, G. Sanacora², S. Powsner³, M. Lippmann¹, J. Krystal²

¹Emergency Medicine, ²Psychiatry, ³Emergency Medicine and Psychiatry, Yale University School of Medicine, New Haven, CT, USA

Background: Rapid-onset antidepressants could have important clinical impact if their benefits extended to ED patients. We examined preliminary feasibility, tolerability and efficacy of single-dose IV ketamine in depressed ED patients with suicide ideation (SI).

Methods: Fourteen depressed ED patients with SI received a single IV bolus of ketamine (0.2 mg/kg) over 1-2 minutes. Patients were monitored for 4 hours, then re-contacted daily for 10 days. Treatment response and time to remission were evaluated using the Montgomery-Asberg Depression Rating Scale (MADRS) and Kaplan Meier survival analysis, respectively.

Results: Brief Psychiatric Rating Scale and Young Mania Rating Scale scores transiently increased in two subjects, consistent with ketamine's cognitive/behavioral effects in other populations. Mean MADRS scores fell significantly from 40.4 (SEM:1.8) at baseline to 11.5 (2.2) at 240 minutes. Median time to MADRS score ≤ 10 was 80 minutes (Interquartile Range:0.67-24 hours). Suicide ideation scores (MADRS item 10) decreased significantly from 3.9 (SEM:0.4) at baseline to 0.6 (SEM:0.2) at 40 minutes post-administration, with improvements sustained over 10 days.

Conclusions: These data provide preliminary, open-label support for the feasibility and efficacy of ketamine as a rapid-onset antidepressant in the ED.