Intravenous Ketamine Infusion & Anxiety, Irritability, and Agitation: Implications for Treating Mixed Features in Adults with Major Depressive/Bipolar Disorder

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Introduction
The purpose of the study herein was to determine the effectiveness of intravenous (IV) ketamine on anxiety, irritability, agitation, and suicidality, in adults with treatment-resistant major depressive disorder (MDD) or bipolar disorder (BD).

- An estimated 20% - 60% of patients present with mixed features
- Mixed features often have a more complex illness presentation, higher rates of non-recovery and chronicity, as well as less favourable response to conventional antidepressants [2]
- A criticism of the DSM-5 definition of mixed features is the exclusion of “overlapping” symptoms (e.g., anxiety, irritability, and agitation; AIA), which are some of the most common symptoms in patients presenting with both hypomanic & depressive symptoms
- We sought to determine the effectiveness of intravenous (IV) ketamine in adults with TRD in the context of Major Depressive Disorder (MDD) or Bipolar Disorder (BD), who were presenting with AIA and suicidal ideation (SI)

Methods
Adults (N = 201) with treatment-resistant MDD or BD received repeat dose IV ketamine treatment at a community-based clinic.

- Mixed features were measured using items on the Generalized Anxiety Disorder-7 (GAD-7) to assess effectiveness of IV ketamine in treating symptoms of mixed features.
- Overall treatment response was measured using The Quick Inventory for Depressive Symptomatology Self-Report-16 (QIDS-SR16).

Results & Conclusion
Retrospective data analyses were performed using a repeated measures hierarchical model to evaluate changes in QIDS-SR16 total score, QIDS-SR16 SI score, GAD-7: anxiety score, GAD-7: irritability score, & GAD-7: agitation scores across IV ketamine infusions to determine its effectiveness in mitigating AIA & SI in patients with MDD or BD.

Participants with AIA experienced a significant reduction in:
- Overall Depressive Symptoms
- Suicidal Ideation
- Anxiety
- Irritability
- Agitation

Preliminary results suggest that IV ketamine is effective in rapidly treating AIA & SI in adults with TRD.