

## **P89. Explosive Aggression in Youth: Medical Management With the Use of Amantadine HCl**

*Dan Matthews, M.D., Larry Fisher, Ph.D., Glenda Matthews, M.D.*

**Background:** In randomized, controlled trials (RCTs) of amantadine HCl for youth with ADHD, autism, or traumatic brain injury, symptom improvements were noted (Donfrancesco, et al, 2007; King, et al, 2001; Kraus, M.F. & Maki, P.M., 1997; Karli, et al., 1999; Meythaler, et al., 2002; Williams, S. E., 2007). However, only limited case studies have shown the effectiveness of amantadine HCl for the treatment of explosive aggression in youth. **Objective:** The current study explores the management of explosive juveniles discharged from residential treatment on a protocol that included amantadine HCl and other medications. **Methods:** Subjects were 190 explosive juveniles (130 male, 60 female; ages 5–17), diagnosed with Mood Disorder or Intermittent Explosive Disorder, discharged from a residential treatment program on amantadine HCl and other medications. Outcomes for the compliant (C group), where amantadine HCl was continued, versus the non-compliant (Non-C group), where amantadine HCl was discontinued for reasons other than side effects or intolerance, were measured by a mail survey of caregivers 6 months post-discharge. **Results:** For the C group, positive outcome was 73.29% (107 out of 146) while for the Non-C group, positive outcome was 56.82% (25 out of 44); Fisher's chi-square analysis (df: 1; two-tailed  $p=0.0430$ ) was significant. **Conclusion:** Although this is not an RCT of the efficacy of amantadine HCl, the data suggest that significantly better positive outcome for explosive youth can occur, 6 months post-discharge from residential treatment, if outpatient physicians are compliant with a protocol that continues the use of amantadine HCl.