

Explosive Child Stabilized without Antipsychotics: A Single Case Study Reversal Design

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Problem

Using an ABAB Reversal Design with high risk children is problematic from an ethical perspective, and few parents would willingly agree to such a procedure. However, the present case study was not a controlled study but one that occurred naturally during the course of treatment for a child with serious neuropsychiatric disorders who was diagnosed with Bipolar Disorder, Obsessive Compulsive Disorder, Attention Deficit Hyperactivity Disorder, Depression, Separation Anxiety, Neonatal Seizures, and a Developmental Encephalopathy secondary to subarachnoid hemorrhage. Such cases are often treated with antipsychotic medications, but a recent study suggests antipsychotics are not necessary (Matthews, Fisher, & Kroll, 2012. Explosive Juveniles: Medical Management without Antipsychotic Medication. ANPA Abstract at *J Neuropsychiatry Clin Neurosci*, 24:2, 256). It was the goal of the current study to evaluate the use of an innovative medication protocol that avoids the risks, and adverse side-effects, of chronic use of antipsychotic medication for this type of high-risk juvenile.

Subject

The case was a seven year-old, Caucasian male, born premature (complicated birth with seizures secondary to a subarachnoid hemorrhage) diagnosed at age 4 with ADHD and developmental encephalopathy, with chronic irritability and explosive outbursts, suicidal ideation, and homicidal threats. He had been treated with the Community Standard Medication Protocol (Treatment A), consisting of mood stabilizers and antipsychotic medication but was still unstable and required three psychiatric hospitalizations before residential placement at age 7.

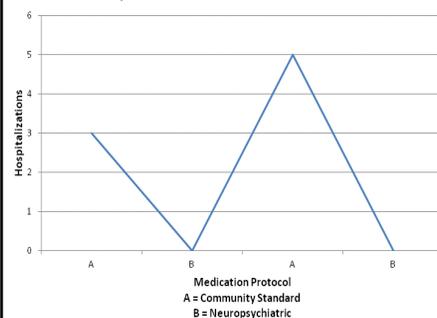
Testing

The EEG and Neuropsychology tests were abnormal suggesting frontal lobe abnormalities consistent with his history of neonatal subarachnoid hemorrhage. Neuropsychology data base was incomplete due to test refusal. Also, there was questionable validity due to poor motivation, variable cooperation, and some sedation effects from his antipsychotic medication (which was discontinued after testing).

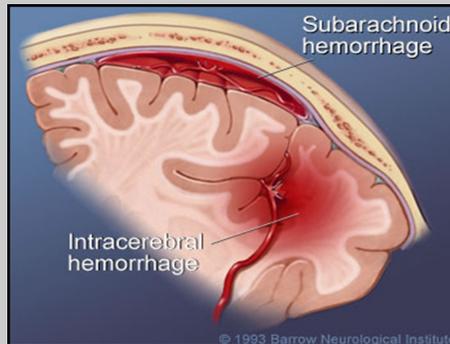
MRI of Subarachnoid Lesion



Hospitalizations for ABAB Protocol



Subarachnoid vs. Intracerebral



Procedure

He was then stabilized on a Neuropsychiatric Medication Protocol (Treatment B) of dopaminergic (amantadine HCl) and anti-convulsant medication (oxcarbazepine) without antipsychotic medication. Psychotherapy was included with both Treatment A and Treatment B. After discharge, he remained stable on the Treatment B protocol for 3 years until a new Psychiatrist put him back on Treatment A. He became unstable, but was continued on treatment A over the next 4 years, with aggressive outbursts that required 5 psychiatric hospitalizations.

Result

He returned to residential placement at age 14 with chronic irritability and explosive outbursts. He was again stabilized on the Treatment B protocol and remained stable. after discharge. at the 1 month, 6 month, and 12 month surveys. Although this is not a controlled study, it simulates an ABAB single case study design comparing the Community Standard Medication Protocol (Treatment A) with the innovative Neuropsychiatric Medication Protocol (Treatment B).

Conclusion

This ABAB reversal design case study, while not a controlled study, suggests that a high risk child with chronic irritability and explosive outbursts can be stabilized on an innovative medication protocol, without the use of antipsychotic medication, combined with residential placement and psychotherapy.

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