CLINICAL PERSPECTIVES

CLINICAL CASE ROUNDS IN CHILD AND ADOLESCENT PSYCHIATRY

The Severe Mood Dysregulation Phenotype: Case Description of a Female Adolescent

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Introduction

Leibenluft et al. (2003a) have proposed criteria for a broad phenotype of pediatric bipolar disorder, known as severe mood dysregulation (SMD). Research findings of differences in comorbidity, family psychiatric history and neuropsychological functioning suggest that the etiology of narrow phenotype bipolar disorder and SMD may be different (Brotman et al. 2006; Brotman et al. 2007).

Leibenluft et al (2003a) propose the following diagnostic criteria for SMD: 1. onset of symptoms before age 12 and occurring for at least 12 months; 2. abnormal mood most days noticeable to others; 3. hyperarousal; 4. marked reactivity to negative emotional stimuli (such as tantrums or rages) at least three times a week; 5. severe and impairing in at least one setting; 6. no cardinal bipolar symptoms; 7. symptoms do not occur episodically; 8. no psychotic disorder, pervasive developmental disorder or post-traumatic stress disorder or current substance use disorder or general medical condition, or IQ <70.

We present a clinical description of chronic irritable mood in a female adolescent that illustrates the criteria of SMD, and the challenges of differential diagnosis and treatment.

Presentation of case

This teen presented at age 14 because of chronic irritability at home and school, and oppositional defiance at home since at least age 10. Her psychiatric history included separation anxiety disorder, trichotillomania and severe oppositional defiant disorder. She met symptom criteria for Attention Deficit Hyperactivity Disorder (ADHD) - inattentive subtype and Oppositional Defiant Disorder ODD on both parent and teacher report on a DSM symptom checklist used at our clinic. A learning disorder was suspected clinically based on longstanding poor school performance. She never met criteria for unipolar depression, psychotic disorder or mania, although she talked excessively.

Family psychiatric history is significant for antisocial personality disorder in the biological father, and generalized anxiety disorder in the mother. Psychosocial history was unremarkable.

Treatment was focused on attempting to decrease emotional reactivity and hostility. Although inattentive symptoms of ADHD were elevated, stimulant medications were not used because these symptoms were not present in childhood. Given the absence of elevated mood and psychotic symptoms, she was tried on fluvoxamine followed by venlafaxine. In both cases there was no observable or subjective benefit to a three-month therapeutic trial. Antipsychotics (quetiapine and risperidone) were tried, as well as Clonidine, but each was discontinued due to lack of effect on primary symptoms of irritability and impulsivity (both antipsychotics and clonidine). Psychotherapy could not be attempted. The family was reluctant to try Lithium, suggested as a mood stabilizer commonly used for mood instability in children (Madaan and Chang, 2007) and requested a trial of escitalopram 5 mg. daily as a family member had a positive response. After a one-month trial she was more flexible with change and requests and her concentration improved. In the office, she was calmer and self-reflective and showed no symptoms of dis-

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inhibition. She has been stable on this dose for 6 months and is performing better at school.

Discussion

We describe one adolescent with chronic irritability as a proposed example of the SMD phenotype. Key features of the case consistent with SMD include: persistent abnormal (irritable) mood prior to age 12, hyperarousal and excessive reactivity to negative emotional stimuli in many contexts, no cardinal symptoms of bipolar disorder and no other suitable diagnosis to better describe the presentation. Consistent with seminal studies on youth with SMD, this girl had severe ODD and ADHD, and a family history of disorders of behaviour. Distinct features included a history of separation anxiety and learning problems.

Clinicians working with SMD youth may encounter difficulties in interacting with, and engaging these youth in treatment. We note that this teen engaged when she was reassured that she would not be forced into treatment or rejected.

This discussion is limited by the lack of longitudinal follow up of children with purported SMD to determine if they develop symptoms more similar to narrow phenotype bipolar disorder, specifically grandiosity, euphoric mood or psychotic symptoms. Further, we do not know how these SMD youth differ from youth with ADHD alone, youth with ADHD and internalizing comorbidity or youth with anxiety disorders or unipolar depressive disorder alone. Indeed, there may be many similarities amongst these children. One study to date has shown the SMD group to have 7 times greater risk of depression in adolescence than children without mood disorders (Brotman et al., 2007). Further research is needed to compare SMD children to those with other more common childhood psychiatric diagnoses.

Limited studies to date suggest that mood stabilizers, including antipsychotics, may be the first pharmacologic option for children who are highly irritable or emotionally reactive with significant functional impairment (Leibenluft et al., 2003b), however attempts to identify another treatable diagnosis should be the first priority. For example, there is evidence that small doses of selective serotonin reuptake inhibitors (SSRI) medications can successfully reduce irritable mood associated with Premenstrual Dysphoric Disorder in adult females (Steiner et al., 2006). Based on the clinical history we report, there is support for this intervention, as well.

More specific treatment studies of children with SMD are needed. Until then, physicians will continue to remain perplexed as to the best course of treatment.

Acknowledgements/Conflict of Interest

The authors have no financial relationships to disclose.

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Commentary to The Severe Mood Dysregulation Phenotype: Case Description of a Female Adolescent

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In this interesting case presentation and discussion Drs Boylan and Eppel raise the issue of the proposed new diagnosis of severe mood dysregulation (SMD), as a variant of pediatric bipolar disorder (Leibenluft et al., 2003). The case presented would, I believe, be typical of cases presumed to meet the new criteria. The issue, as the authors discuss, is whether we need a new diagnosis for symptoms that are common in many disorders. As they point out we lack longitudinal data to confirm the stability of these symptoms and how such youth differ from youth with other disorders combining externalizing and internalizing psychopathology. The overlap with depression especially when there is comorbid behavioural symptomatology is common. Although the authors point to response to intervention as potentially helpful it is important to appreciate that many disorders respond to the same interventions and so this may not be a useful way of establishing the validity of SMD as a distinct entity. Given that difficulties with affect regulation occur across all disorders (Bradley, 2000), our energies might be better spent understanding factors that contribute to such affect/mood dysregulation as this would provide a clearer focus for intervention.

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