Disruptive Mood Dysregulation Disorder (DMDD) Fact Sheet

Disruptive Mood Dysregulation Disorder (Children and Adolescents)

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Like adults, children and adolescents can get depressed, displaying persistent sadness and loss of interest in once pleasurable activities, including a sense of discouragement and feelings of hopelessness. More often, however, children display a mood of irritability rather than one of sadness. Chronic, unrelenting moods of irritability and anger punctuated with severe and recurrent temper tantrums are the distinctive features of disruptive mood dysregulation disorder. Experts estimate that the condition affects 2 to 5 percent of children and is more common among males than females. As with other depressive conditions, disruptive mood dysregulation disorder can have far-reaching effects on the functioning and adjustment of young people. It is associated with high levels of social impairment and school suspensions. Psychotherapy is often a highly effective form of treatment, and depending on the severity of the symptoms, medication may also be prescribed.

Definition

The onset of disruptive mood dysregulation disorder in children is under the age of 10, and consists of chronic, severe, persistent irritability. The extreme irritability manifests both in a pervasive irritable or angry mood and in frequent, developmentally inappropriate temper outbursts displayed verbally in rages and or behaviorally in physical aggression toward people or property. The disorder impairs functioning in at least two of the three settings in which children typically spend their time—with parents, teachers, or peers—and it does so severely in at least one of those settings. A relatively newly defined condition, the diagnosis of disruptive mood dysregulation disorder is intended to accurately distinguish some children who were previously diagnosed with pediatric bipolar disorder, in which irritability tends to be episodic. Disruptive mood dysregulation disorder is more common than bipolar disorder before adolescence, and symptoms tend to decrease as an adolescent moves into adulthood. Longitudinal studies show that severe mood dysregulation in childhood correlates with later depression.

Symptoms

As cataloged by the DSM-5, the signs and symptoms of disruptive mood dysregulation disorder include:

- Severe recurrent temper outbursts manifested verbally in verbal rages and or behaviorally in physical aggression toward people or property
- The temper outbursts are inconsistent with the child's developmental level
- Outbursts generally occur three or more times a week
- Between temper outbursts, the child is irritable or angry most of the time
- The symptoms have been present for at least 12 months, and the child has not had a period of longer than three consecutive months without symptoms
- The symptoms manifest in at least two out of three of the child's usual settings—home, school, or peers—and are severe in at least one of them
- The symptoms begin before age 10, and diagnosis is not made for the first time prior to age 6 or after age 18
- The symptoms are not attributable to major depression, mania, autism spectrum disorder, oppositional defiant disorder, or another mental health condition

The symptoms of DMDD may overlap with those of attention deficit hyperactivity disorder and oppositional defiant disorder.

Causes

There is no single known cause of this mood disorder. Rather, it likely results from a combination of genetic, biological, environmental, and psychological factors.

Brain-imaging technologies, such as magnetic resonance imaging, have shown that the brains of people who have mood dysregulation look different than those of people without it. The parts of the brain responsible for regulating mood, thinking, sleep, appetite, and behavior appear to function abnormally. In addition, important neurotransmitters—chemicals that brain cells use to communicate with each other—appear to function abnormally. In addition, researchers have identified errors in the way the brains of children with DMDD process the facial cues of others. But these findings do not reveal why the condition has occurred.

In addition, trauma, loss of a loved one, a difficult relationship, or any stressful situation may trigger an episode. Subsequent mood episodes may occur with or without an obvious trigger.

Is there a genetic link in children with disruptive mood dysregulation?

Some types of mood dysregulation tend to run in families, suggesting a genetic link. However, mood disorders can occur in people without family histories of depression as well. Genetics research indicates that risk for depression results from the influence of multiple genes acting together with environmental or other factors.

Treatment

Mood dysregulation is a treatable disorder, even in the most severe cases. As with many illnesses, the earlier that treatment can begin, the more effective it is and the greater the likelihood that recurrence can be prevented.

The first step to getting appropriate treatment is to visit a physician. Certain medications, and some medical conditions such as viruses or a thyroid condition, can cause the same symptoms as mood dysregulation. A doctor can rule out such possibilities by conducting a physical examination, interview, and lab tests. Once a medical condition is ruled out as a cause, the doctor can conduct a psychological evaluation or refer the patient to a mental health professional.

The doctor or mental health professional will conduct a complete diagnostic evaluation. They should discuss any family history of depression or other mental health conditions, and get a complete history of symptoms—when the symptoms started, how long they have lasted, their severity, when they manifest. If they have occurred before, how they were treated. The doctor may also ask if the young person is using alcohol or other agents and whether the patient is thinking about self-harm or even death.

Given the complex nature of disruptive mood dysregulation disorder, and its negative impact on family functioning, a combination of therapeutic approaches may be prescribed. They include individualized psychotherapy for the child, medication with psychostimulants such as those used to treat ADHD, and parent training. Treatment may also include targeted interventions involving the school environment.

Cognitive-behavioral therapy, CBT, has been proven effective in treating mood dysregulation and many other conditions. Studies show that CBT helps people change negative styles of thinking and behaving. For those with DMDD, CBT may be aimed at teaching children how to regulate their moods and improve their frustration tolerance. Children may be taught coping skills for regulating anger and to identify and defuse cognitive distortions about the attitudes and intentions of others that underlie hostility.

Psychostimulants such as those used in the treatment of attention deficit hyperactivity disorder are often used to treat children with DMDD, and they are typically combined with behavioral management. Stimulant treatment has been proved effective in reducing anger and hostility and explosive outbursts. Stimulant treatment may also increase frustration tolerance and decrease aggression.

The chronic irritability component of DMDD is linked to depressive disorder. Agents approved for the treatment of major depression in pediatric populations include selective serotonin reuptake inhibitors or SSRIs—escitalopram, fluoxetine, fluvoxamine, and sertraline. The serotonin and norepinephrine reuptake inhibitor (SNRI) duloxetine is also FDA-approved for use in pediatric patients.

Is there research on pharmacologic treatment for mood dysregulation?

Few studies have been conducted on pharmacologic treatment targeted directly at DMDD, and standardized guidelines for treating the condition do not yet exist. Treatment recommendations are typically based on knowledge of medications for associated symptoms, such as irritability and aggression.

What is parent management training?

Parent management training is aimed at providing parents with specific strategies to enhance effective discipline and communication. Parents learn the right way to praise, as well as how to encourage positive behaviors. This training can be conducted with a mental health professional.

Reference

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