CHILD AND ADOLESCENT BIPOLAR DISORDER: An Update from the National Institute of Mental Health

Research findings, clinical experience, and family accounts provide substantial evidence that bipolar disorder, also called manic-depressive illness, can occur in children and adolescents. Bipolar disorder is difficult to recognize and diagnose in youth, however, because it does not fit precisely the symptom criteria established for adults, and because its symptoms can resemble or co-occur with those of other common childhood-onset mental disorders. In addition, symptoms of bipolar disorder may be initially mistaken for normal emotions and behaviors of children and adolescents. But unlike normal mood changes, bipolar disorder significantly impairs functioning in school, with peers, and at home with family. Better understanding of the diagnosis and treatment of bipolar disorder in youth is urgently needed. In pursuit of this goal, the National Institute of Mental Health (NIMH) is conducting and supporting research on child and adolescent bipolar disorder.

A Cautionary Note

Effective treatment depends on appropriate diagnosis of bipolar disorder in children and adolescents. There is some evidence that using antidepressant medication to treat depression in a person who has bipolar disorder may induce manic symptoms if it is taken without a mood stabilizer. In addition, using stimulant medications to treat attention deficit hyperactivity disorder (ADHD) or ADHD-like symptoms in a child with bipolar disorder may worsen manic symptoms. While it can be hard to determine which young patients will become manic, there is a greater likelihood among children and adolescents who have a family history of bipolar disorder. If manic symptoms develop or markedly worsen during antidepressant or stimulant use, a physician should be consulted immediately, and diagnosis and treatment for bipolar disorder should be considered.

Symptoms and Diagnosis

Bipolar disorder is a serious mental illness characterized by recurrent episodes of depression, mania, and/or mixed symptom states. These episodes cause unusual and extreme shifts in mood, energy, and behavior that interfere significantly with normal, healthy functioning.

Manic symptoms include:

- Severe changes in mood—either extremely irritable or overly silly and elated
- Overly-inflated self-esteem; grandiosity
- Increased energy
- Decreased need for sleep—ability to go with very little or no sleep for days without tiring
- Increased talking—talks too much, too fast; changes topics too quickly; cannot be interrupted
- Distractibility—attention moves constantly from one thing to the next
- Hypersexuality—increased sexual thoughts, feelings, or behaviors; use of explicit sexual language
- Increased goal-directed activity or physical agitation
- Disregard of risk—excessive involvement in risky behaviors or activities

Depressive symptoms include:

- Persistent sad or irritable mood
- Loss of interest in activities once enjoyed
- Significant change in appetite or body weight
- Difficulty sleeping or oversleeping
- Physical agitation or slowing
- Loss of energy
- Feelings of worthlessness or inappropriate guilt
- Difficulty concentrating
- Recurrent thoughts of death or suicide

Symptoms of mania and depression in children and adolescents may manifest themselves through a variety of different behaviors. When manic, children and adolescents, in contrast to adults, are more likely to be irritable and prone to destructive outbursts than to be elated or euphoric. When depressed, there may be many physical complaints such as headaches, muscle aches, stomachaches or tiredness, frequent absences from school or poor performance in school, talk of or efforts to run away from home, irritability, complaining, unexplained crying, social isolation, poor communication, and extreme sensitivity to rejection or failure. Other manifestations of manic and depressive states may include alcohol or substance abuse and difficulty with relationships.

Existing evidence indicates that bipolar disorder beginning in childhood or early adolescence may be a different, possibly more severe form of the illness than older adolescent-and adult-onset bipolar disorder. When the illness begins before or soon after puberty, it is often characterized by a continuous, rapid-cycling, irritable, and mixed symptom state that may co-occur with disruptive behavior disorders, particularly attention deficit

hyperactivity disorder (ADHD) or conduct disorder (CD), or may have features of these disorders as initial symptoms. In contrast, later adolescent- or adult-onset bipolar disorder tends to begin suddenly, often with a classic manic episode, and to have a more episodic pattern with relatively stable periods between episodes. There is also less co-occurring ADHD or CD among those with later onset illness.

A child or adolescent who appears to be depressed and exhibits ADHD-like symptoms that are very severe, with excessive temper outbursts and mood changes, should be evaluated by a psychiatrist or psychologist with experience in bipolar disorder, particularly if there is a family history of the illness. This evaluation is especially important since psychostimulant medications, often prescribed for ADHD, may worsen manic symptoms. There is also limited evidence suggesting that some of the symptoms of ADHD may be a forerunner of full-blown mania.

Findings from an NIMH-supported study suggest that the illness may be at least as common among youth as among adults. In this study, one percent of adolescents ages 14 to 18 were found to have met criteria for bipolar disorder or cyclothymia, a similar but milder illness, in their lifetime. In addition, close to six percent of adolescents in the study had experienced a distinct period of abnormally and persistently elevated, expansive, or irritable mood even though they never met full criteria for bipolar disorder or cyclothymia. Compared to adolescents with a history of major depressive disorder and to a never-mentally-ill group, both the teens with bipolar disorder and those with subclinical symptoms had greater functional impairment and higher rates of co-occurring illnesses (especially anxiety and disruptive behavior disorders), suicide attempts, and mental health services utilization. The study highlights the need for improved recognition, treatment, and prevention of even the milder and subclinical cases of bipolar disorder in adolescence.

Treatment

Once the diagnosis of bipolar disorder is made, the treatment of children and adolescents is based mainly on experience with adults, since as yet there is very limited data on the efficacy and safety of mood stabilizing medications in youth. The essential treatment for this disorder in adults involves the use of appropriate doses of mood stabilizers, most typically lithium and/or valproate, which are often very effective for controlling mania and preventing recurrences of manic and depressive episodes. Research on the effectiveness of these and other medications in children and adolescents with bipolar disorder is ongoing. In addition, studies are investigating various forms of psychotherapy, including cognitive-behavioral therapy, to complement medication treatment for this illness in young people.

Valproate Use

According to studies conducted in Finland in patients with epilepsy, valproate may increase testosterone levels in teenage girls and produce polycystic ovary syndrome in women who began taking the medication before age 20 [5]. Increased testosterone can lead to polycystic ovary syndrome with irregular or absent menses, obesity, and abnormal growth of hair. Therefore, young female patients taking valproate should be monitored carefully by a physician

NIMH is attempting to fill the current gaps in treatment knowledge with carefully designed studies involving children and adolescents with bipolar disorder. Data from adults do not necessarily apply to younger patients, because the differences in development may have implications for treatment efficacy and safety [4]. Current multi-site studies funded by NIMH are investigating the value of long-term treatment with lithium and other mood stabilizers in preventing recurrence of bipolar disorder in adolescents. Specifically, these studies aim to determine how well lithium and other mood stabilizers prevent recurrences of mania or depression and control subclinical symptoms in adolescents; to identify factors that predict outcome; and to assess side effects and overall adherence to treatment. Another NIMH-funded study is evaluating the safety and efficacy of valproate for treatment of acute mania in children and adolescents, and also is investigating the biological correlates of treatment response. Other NIMH-supported investigators are studying the effects of antidepressant medications added to mood stabilizers in the treatment of the depressive phase of bipolar disorder in adolescents.

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