

## Distinctions of bipolar disorder symptoms in adolescence

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**Key words:** bipolar disorder; adolescents; attention-deficit/hyperactivity disorder; comorbidity.

**Summary.** Bipolar disorder in adolescents is a serious mental illness with problematic diagnosis that adversely affects social, academic, emotional, and family functioning. The objective of this study was to analyze features of premorbid and clinical symptoms, comorbidity, and course of bipolar disorder in adolescence. Data for analysis were collected from all case histories ( $N=6$ ) of 14–18-year-old patients, hospitalized with diagnosis of bipolar disorder in the Unit of Children's and Adolescents' Psychiatry, Department of Psychiatry, Hospital of Kaunas University of Medicine, during the period from 2000 to 2005. Analysis of bipolar disorder course showed that five patients previously had been diagnosed with an episode of depression. The most frequent symptoms typical to bipolar disorder were disobedience and impulsive behavior, rapid changes of mood. The most common premorbid features were frequent changes of mood, being active in communication, hyperactive behavior. Adolescence-onset bipolar disorder was frequently comorbid with emotionally instable personality disorder, borderline type. Findings of the study confirm the notion that oppositional or impulsive behavior, rapid changes of mood without any reason, dysphoric mood and euphoric mood episodes with increased energy were cardinal symptoms of bipolar disorder with mania in adolescents. Most frequent premorbid features of these patients were quite similar to attention-deficit/hyperactivity disorder making differential diagnosis problematic.

### Introduction

Bipolar disorder (BD) is a serious mental illness that adversely affects social, academic, emotional, and family functioning of patients of different ages. BD prevalence in adolescents is estimated to be about 0.1–1%. According to the data of National Mental Health Center, the incidence of BD in 14–18-year-old adolescents in Lithuania was 22 BD cases in 2004; 23 BD cases were diagnosed in 2005. Discrepancy between national statistical data and findings of the studies on the incidence and prevalence of BP carried out in the other countries allows hypothesizing that this disorder under-diagnosed in Lithuania. Possible reasons for that could be lack of knowledge on the specificity of its symptoms in adolescence and difficulties in differentiating it from other mental and behavioral disorders.

Current data suggest that adolescents with BD have a chronic course of the illness, characterized by continued morbidity, comorbidity, and mood cyclicality (1, 2). Two major difficulties in diagnosing bipolar disorder in adolescents are its overlap in symptomatology

with attention-deficit/hyperactivity disorder (ADHD) and its developmentally distinct presentation from that in adults. Comorbid conditions are common in bipolar disorder in adolescence and complicate the diagnosis of BD. In addition to ADHD, they include anxiety disorders, oppositional defiant disorder, and conduct disorder (3, 4).

Episode of mania or hypomania is required for the diagnosis of bipolar disorder in distinction from unipolar depression. There are a lot of symptoms that are associated with mania in adolescents with BD: periods of increased energy, accompanied by distractibility, pressured speech, irritability, grandiosity, racing thoughts, decreased need for sleep, and euphoria/elation (5). Euphoric mood is generally described as giddy, goofy, hyperexcited, silly states with laughing fits (6). Some findings challenge the notion that euphoria represents a cardinal symptom of mania in adolescents and can be substituted by dysphoric, irritable mood (7). While severe irritability can be a common feature in adolescents with or without a psychiatric diagnosis, the irritability associated with

mania has a much more hostile, vicious, and attacking quality. In addition to a general level of irritability, adolescents with mania also present with extremely impairing dysphoric, explosive episodes that generally occur daily with little or no precipitant. These explosions can last up to an hour or longer and may involve destruction of property. During these rages, adolescents are hard to calm and often lash out physically at those around them. Swearing and hostile comments are also common (6). Other clinical presentations of adolescent bipolar disorder are variable, including disruptive behavior, moodiness, irritability, difficulties in sleeping, impulsivity, hyperactivity, and decreased concentration. Episodically they experience short attention span, low frustration tolerance, explosive anger followed by periods of guilt, depression, and declining academic performance (8).

Adolescent-onset bipolar disorder is commonly comorbid with other psychiatric disorders, especially disruptive disorders. The major symptomatic difference between ADHD or conduct disorder and bipolar disorder is that disruptive disorders are chronic whereas mania in BD is episodic and shows itself with a change in functioning. Disruptive disorders reflect aberrant attention and/or behavior while mania is primarily characterized by abnormal mood and activity. In addition, earlier age of onset is more commonly seen in ADHD. Other psychiatric and medical conditions may also mimic symptoms of bipolar disorder. Differential diagnoses to be considered include thyroid disorders, neurologic disorders, substance abuse, ADHD, conduct disorder, schizophrenia (9).

Bipolar disorder generally has an insidious onset in adolescents. Nearly one-quarter of parents cannot identify an age of onset, but felt that the child had "always" had an abnormal mood, even by infant standards (10). Adolescents with BP spectrum disorders show a continuum of BD symptom severity from sub-syndromal to full syndromal with frequent mood fluctuations (11). Adolescents unpredictably switching in and out of depression, irritable mania with explosions, and euphoric mania throughout the day, almost every day, with very little time spent in a regular age-appropriate mood state. Such a state has been referred to as *ultra-rapid cycling* and has been noted by a number of investigators (12, 13).

Adolescents with major depression are at high risk to develop BD (14). Bipolar disorder in adolescents is often familial (15). Results of several studies suggest a familial link between bipolar disorder in parents and behavioral disinhibition in their offspring. Behavioral disinhibition may be a familially transmitted predis-

posing factor for dysregulatory distress later in life (16). Features frequently noted in adolescents with a heightened risk for bipolarity are anxious/worried, poor/distractible attention in school, easily excited, hyper-alert, mood changes/labile, role impairment in school, somatic complaints, and stubborn/determined. Five additional manic-like modes of behavior were found more evident among at-risk adolescents: high energy, decreased sleep, problems with thinking/concentration, and excessive and loud talking. Children of parents with BD episodically manifested mini clusters of potentially prodromal characteristics more frequently than the children of normal controls. None of these adolescents met any of the sets of diagnostic criteria for prepubertal bipolar disorder (17).

We did not manage to find any published results of studies on bipolar disorder of adolescents carried out in Lithuania. All studies on affective disorders of adolescents considered just unipolar depressive disorder and its relationship or comorbidity with various other pathologies (18–21). This study was intended as a pilot study to assess the features of adolescents' bipolar disorder and its possible influence on the diagnosing of this disorder.

The objective of this study was to analyze features of premorbid and clinical symptoms, comorbidity, and course of bipolar disorder (BD) in adolescence.

### Sample and methods

Data for analysis were collected from all case histories (N=6) of 14–18-year-old patients, hospitalized with diagnosis of bipolar disorder in the Unit of Children's and Adolescents' Psychiatry, Hospital of Kaunas University of Medicine, during the period from 2000 to 2005. Diagnosis of the disorder was established by consensus of two or three child-adolescent psychiatrists practicing in the department. Case histories included general demographic data, mental state description, and anamnesis of the course of the disorder and functioning before the onset of bipolar disorder provided by the parent or caretaker of the patient.

### Results

During the studied period, five girls and one boy with diagnosis of BD were treated in the Unit of Children's and Adolescents' Psychiatry, Hospital of Kaunas University of Medicine. Their age ranged from 14 to 18 years (the mean age was 15.67 years).

Bipolar disorder with mania without psychosis was the most frequently diagnosed type of bipolar disorder (three cases). Other types of bipolar disorder were

diagnosed in single cases: bipolar disorder with hypomania (one case), mania with psychosis (one case), and moderate type of depression (one case).

Analysis of anamnesis concerning the course of the disorder showed that five patients previously had been diagnosed with an episode of depression. Two patients had been previously diagnosed with episode of hypomania. One patient had episode of mania without psychosis, and one adolescent had manic episode with psychosis.

Descriptions of mental state at the moment of establishing clinical diagnosis were analyzed to find the most frequent symptoms of BD in adolescents. Most frequent symptoms typical to BD with mania were disobedience and impulsive behavior, rapid changes of mood, dysphoric mood, and euphoric mood accompanied with increased energy (Fig.). Irritability associated with BD with mania was more hostile, vicious, with dysphoric, explosive episodes, than in normal adolescent emotional swings. Depressed mood with decreases energy and lack of self-confidence were noted in the case of bipolar disorder with moderate episode of depression.

Reports of parents about the functioning of the patients before the onset of the symptoms of BD were

analyzed to assess the typical premorbid features of bipolar disorder. Analysis of anamnesis provided by parents showed that the most frequent premorbid features were frequent changes of mood (five cases) and hyperactive behavior (five cases), being active in communication (six cases). Other characteristic features of these adolescents were good results of the studies, lack of concentration of attention, disobedience. They resemble ADHD, which is more frequently diagnosed than BD in adolescence.

More than half (60%) of the patients studied had diagnoses of comorbid psychiatric and/or somatic disorders. Most frequent psychiatric diagnosis found was emotionally instable personality disorder, borderline type.

Comorbidity with euthyretic struma was found in 33.3% of BD cases in adolescents (Table). Comorbid endocrine pathology had no significant influence on clinical symptoms, premorbid features of BD.

#### Discussion and conclusions

Just six cases histories of bipolar disorder, found in the period of 6 years, was unexpected and allows us to hypothesize that bipolar disorder in adolescents is under- or misdiagnosed in Lithuania as it is

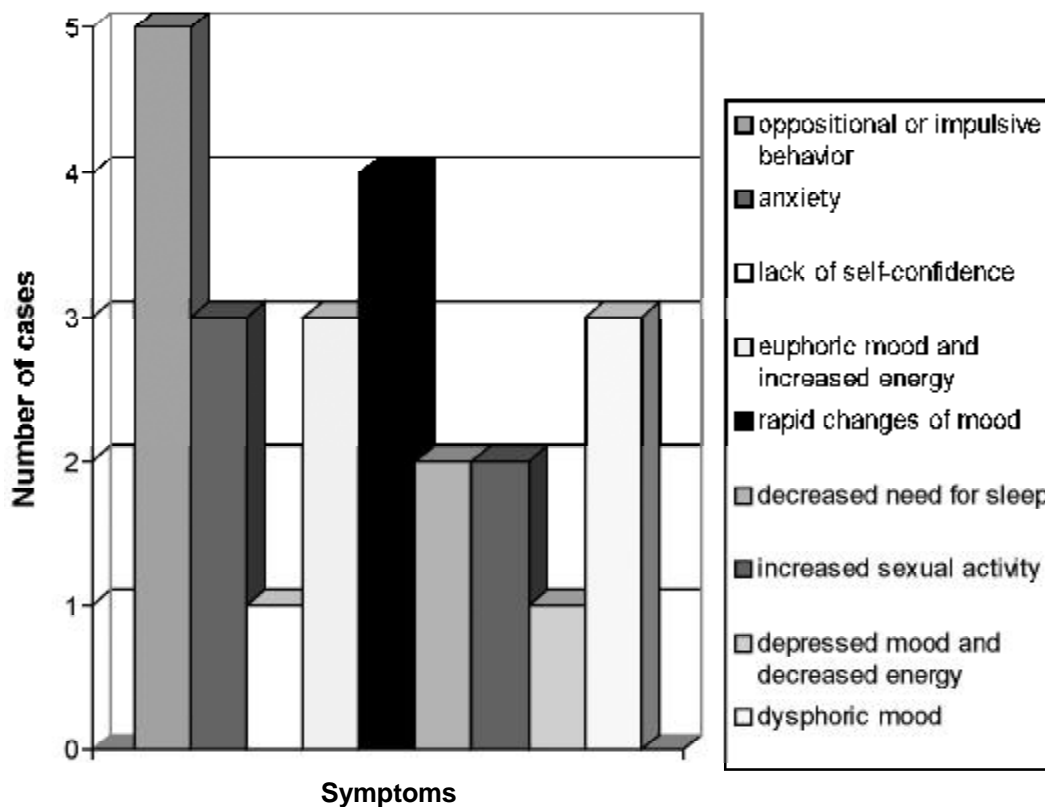


Fig. Symptoms of bipolar disorder in adolescents

**Table. Comorbidity of bipolar disorder in adolescents**

No.	Comorbid disorder	n (%)	Comments
1.	Emotionally instable personality disorder, borderline type	2 (33.3)	All these patients had suicidal attempt
2.	Adaptation disorder	1 (16.7)	–
3.	Endocrine pathology	2 (33.3)	Struma diffusa IA, euthyreotica

contrasted with the data on the prevalence and incidence of BD in other countries. This supports opinion that bipolar disorder in childhood and adolescence is difficult to diagnose.

Most of the patients had manic or hypomanic episodes what was probably determined by the method of data collection – study was conducted in the hospital setting, while first episodes of depression were usually treated in outpatient settings.

Findings of our study confirm the notion that oppositional or impulsive behavior, rapid changes of mood without any reason, dysphoric mood, and euphoric mood accompanied with increased energy were cardinal symptoms of BD with mania in adolescents. Depressed mood accompanied with decreased energy, anxiety, and lack of self-confidence were typical to BD with moderate episode of depression. These symptoms have developmentally distinct presentation from that in adults with high rates of irritability, chronicity, and mixed states (3, 4).

Premorbid features of adolescence BD most frequently mentioned in psychiatric literature are hyperactive behavior, frequent changes of mood, anxiety, easily exited, hyper alert, somatic complaints. Most frequent premorbid features of BD in our study were quite similar to attention-deficit/hyperactivity disorder:

frequent changes of mood, being active in communication, hyperactive behavior. ADHD symptoms are more typical for boys, but in our analyzed cases, similar symptoms were also incident to girls with BD. Premorbid features that were distinct from ADHD were more frequent and longer lasting change of mood, good marks at studies, and active involvement in after-class activities. In our every day clinical practice dealing with such cases of hyperactive, disobedient behavior with frequent changes of mood, child-adolescent psychiatrists would consider these distinctions differentiating diagnosis between bipolar disorder of mania type and attention-deficit/hyperactive disorder.

Another problem establishing correct diagnosis of BD can be traced in the finding that the most frequent comorbid psychiatric disorder was emotionally instable personality disorder of borderline type. This diagnosis was based partially on the repeated suicidal attempts and impulsive behavior, symptoms that are also inherent in bipolar disorder. It shows that bipolar disorder can be misdiagnosed for the personality disorder especially in the older adolescents.

These findings of the study show that bipolar disorder is difficult to diagnose and requires future clinical studies to improve its diagnosing and treatment.

## Bipolinio sutrikimo ypatybės paauglystėje

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**Raktažodžiai:** bipolinis sutrikimas, paaugliai, aktyvumo ir dėmesio sutrikimas, komorbidiškumas.

**Santrauka.** Paauglių bipolinis nuotaikos sutrikimas yra sunki liga, kuri neigiamai veikia socialinę, mokslo, emocinę gyvenimo sferą bei šeimos gyvenimą, yra sunkiai diagnozuojama. Tyrimo tikslas – išnagrinėti paauglių bipolinio sutrikimo klininius simptomus, komorbidiškumą, iki susirgimo vyravusius simptomus bei ligos eigą. Išanalizuotos visos ligos istorijos (N=6) 14–18 metų pacientų, kuriems diagnozuotas bipolinis sutrikimas ir kurie gydyti Kauno medicinos universiteto Vaikų ir paauglių psichiatrijos sektoriuje 2000–2005 m. Tiriant bipolinio sutrikimo eigą, nustatyta, kad penkiems pacientams iki hospitalizavimo jau buvo diagnozuoti depresijos epizodai. Būdingiausi bipolinio sutrikimo simptomai buvo nepaklusnus ir impulsyvus elgesys,

greita nuotaikų kaita. Dažniausi iki susirgimo pastebėti simptomai buvo aktyvus dalyvavimas užklausinėje veikloje, hiperaktyvus elgesys, greita nuotaikų kaita. Dažniausiai diagnozuotas gretutinis sutrikimas buvo emociškai nestabilaus tipo asmenybės sutrikimas, ribinis tipas. Šio tyrimo duomenys patvirtina nuomonę, kad neklusnus arba impulsyvus elgesys, greita nuotaikų kaita be priežasties, disforiška ir euforiška nuotaika bei padidėjęs energetinis potencialas yra vyraujantys paauglių manijos simptomai. Iki susirgimo dažniausiai nustatomi simptomai panašūs į aktyvumo ir dėmesio sutrikimą – į tai reikia atsižvelgti diagnozuojant šiuos sutrikimus.

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