BIPOLAR DISORDER IN CHILDREN: THE DIAGNOSTICAL CHALLENGE

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ABSTRACT

The bipolar disorder becomes more and more frequent in the pediatric field, raising numerous questions regarding the diagnosis. In most cases, the standard criteria of the disease are not fully met in the case of a child, requiring their particularization and a more accurate classification. Also, a central issue is the differentiation and/or detection of comorbidity with ADHD and conduct disorders in children.

Keywords: bipolar disorder, ADHD, conduct disorder, mania/hypomania in children

INTRODUCTION

Although bipolar disorder has been regarded as a rare pathology in children and adolescents in recent years there has been a significant increase in its debut on early age. According to recent studies, it occurs in 1.8% of children and adolescents (1).

Bipolar disorder consists of either manic followed by depressive episodes or just manic episodes of different intensities. Classically, in adults, there are two types of bipolar disorders, the first, type I, being characterized by at least one episode of mania and one or more of depression or hypomania, and the second form, type II, with alternation of hypomanic episodes with depressive ones (2).

The successful applicability of correct diagnostic of an affective disorder for children and particularly for preschool, unfortunately remains unclear.

There can be distinguished many differences in the manifestation of bipolar disorder in children than that of adults (Table 1).

TABLE 1. *Bipolar disorder – child vs. adult*

	Bipolar disorder in child	**Bipolar disorder in adult**
Debut	Puberty/early adolescence	The end of adolescence, 3rd decade of life
Nature of simptoms	Longer symptomatic stages	Asymptomatic for long periods between relapses
Mixed episodes	Very frequent	Relatively less common
Symptoms of psychosis	Rare	More frequent
Family history	Very common	Less common that in bipolar disorder in child
ADHD as comorbidity	60-90%	Much less common
The stability of the type of bipolar disorder	Unstable, switching frequently from non-specific form to type I or II	More stable

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The diagnosis of bipolar disorder in children and adolescents

Most children and adolescents do not meet DSM criteria for bipolar I or II disorder, for many reasons, including rapid cycling symptoms, non-specificity of certain signs and also their duration. Currently COBY study (the course and outcome of bipolar youth) is the only one who adapts classification of bipolar disorders in children, as follows: bipolar disorder type I, bipolar disorder type II and bipolar disorder NOS (not otherwise specified) (3,5,12). NOS bipolar disorder is characterized by rates of suicide, functional deficit and comorbidity, which are similar to the other two types, but fail to met all the criteria (Table 2).

According COBY, bipolar spectrum disorders in children are episodic psychiatric disorders most commonly characterized by subsymptomatic episodes, especially depressive or mixed elements and rapid mood cycling (3,5).

TABLE 2. *COBY criteria for bipolar disorder NOS (3)*

Children and adolescents who have clinical symptoms relevant to bipolar spectrum and do not meet DSM criteria for bipolar disorder type I or II , but have periods when an elevated, expansive or irritable mood can be distinguished + more
1. Two manic symptoms in DSM
2. A marked change in general functioning
3. Duration of symptoms for at least 4 hours a day
4. A minimum of 4 consecutive days in which criteria 1, 2, 3 are meet

Signs and symptoms of bipolar disorder in children and adolescents

Specific signs of mania/hypomania in children are: elevated or expansive mood, irritability. Patients are easily entertained, have logorrhoea, flight of ideas, decreased need for sleep, hypersexuality, increased self esteem, sometimes delusions of grandiosity and hallucinations. Also they are involved in dangerous activities causing them great pleasure, ignore rules and have a poor judgment. Children with elation mood can laugh without reason and can manifest „contagious“ happiness in inappropriate circumstances. Hypersexuality occurs in the absence of any abuse (abused children are often anxious and compulsive) and is characterized by inappropriate flirting, vulgar language and trivial behaviour.

The decreased need for sleep manifests by the fact that the pediatric patient always seeks new activities , dont feel the fatigue (unlike the children with ADHD who can not sleep due to anxiety, stimuli or inadequate sleep hygiene). However, children with bipolar disorder are attracted by complicated toys and tend to write, paint or draw things more advanced than their age. Regarding hallucinations, it is necessary to distinguish them from benign distortion of perception, which occurs frequently in children (1,4,11,12).

Bipolar depression in children is characterized by sadness, episodes of unjustified crying, hypersomnia or insomnia, agitation, irritability, withdrawal from normally enjoyable activities, apathy, leading to suicidal ideation (1,4).

Some studies reported that 91% of children and 57% of adolescents with bipolar disorder have also ADHD. Another common comorbidity, but often neglected in children, is the conduct disorders, occurring in 74% of children with this condition (4).

Tools for assessing the clinical symptoms of bipolar disorder in children

There are several scales used in clinical practice for the evaluation of symptoms of mania or depression in bipolar disorder in children. FIND scala targets four coordinates: frequency (symptoms present more days per week), intensity (severity of symptoms), number (3-4 times per day), duration (symptoms lasting more than 4 hours per day). Another specific quantification scale of mania is YMRS (Young Mania Rating Scale) which is used in children aged 5 to 17 years, with a variant for parents, allowing them to assess the severity of symptoms (P-MRS-parent mania rating scale). In addition, another useful tool for assesing is MDQ (Mood disorder questionnaire) that has 15 dichotomous items for symptom regarding mood, being used to children over 12 years, even if it was originally created for adults. Finally, another assessment tool widely used is the Mini-International Neuropsychiatric Interview (MINI), which is a short diagnostic interview based on DSM IV-TR and ICD-10, takes about15 minutes and has a version of MINI-Kid useful for children (9 10).

The differential diagnosis of bipolar disorder in children

Many children/adolescents may experience less specific symptoms (distractibility, hyperactivity, abnormal emotional reactivity), which may be present in other psychiatric disorders such as ADHD, conduct disorder, posttraumatic stress disorder, pervasive developmental disorders, which may mislead the examiner in the diagnosis of bipolar disorder or to overdiagnose this nosological category (1,4,11).

One of the main challenges of differential diagnosis is with ADHD , because sometimes it's very difficult to differentiate the manic/hypomanic symptoms (logorheea in bipolar disorder/the excessive talking in ADHD, psychomotor agitation in bipolar disorder/hyperkinesis of ADHD, distractibility which is present in both medical conditions) (Table 3). Ideally, the duration and frequency of symptoms should be pursued in order to establish a clear diagnosis of bipolar disorder in children and for a correct differentiate diagnosis from ADHD which it is not an episodic disorder (1,6,7,12).

TABLE 3. *Bipolar disorder in children vs. ADHD (1)*

Symptoms	Bipolar disorder	ADHD
Elevated mood	Association with elements of grandiosity	Less frequent
Hypersexuality	Present	Absent
Psychotics simptoms	Present	Absent
Iritability	Dominant	Less dominant
Self harm and suicidal behavior	Frequent	Rare
Family history	History of bipolar disorder or depression	ADHD
Flight of ideas and incoherence	Present	Absent

However, most frequently symptoms as irritability, hostility, impulsivity, hypersexuality, are interpreted as an uninhibited social behavior, generally being assigned to conduct disorders and not to bipolar disorders. The main difference between these two diseases is that the conduct disorder occurs slowly and signs and symptoms escalate progressively, from mild to severe, while in bipolar disorder the clinical onset occurs suddenly (1.4, 7)

Hence, studies show that the signs that appear exclusively in mania/hypomania (grandiosity, elevated mood, flight of ideas, hyperactivity routed to multiple purposes, hypersexuality and lower physiological need for sleep) are vital for the diagnosis of bipolar disorder (13).

In clinical practice, there may be a number of general medical conditions, often chronical, of endocrine, neurological or infectious nature that can mimic different mood swings symptoms that can question the diagnosis of bipolar disorder (Fig. 1).

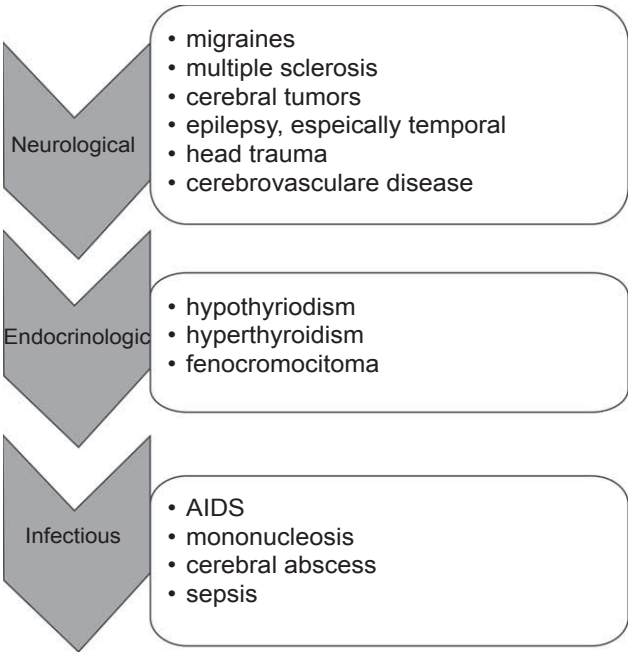

FIGURE 1. *Other general medical conditions that can mimic mood swings symptoms (6)*

CONCLUSION

Symptoms of bipolar disorder in children and adolescents is atypical in comparisson to that of the adult. Children who have been diagnosed with this disease have rapid mood and behavior cycling, while is often associated with other psychiatric diseases, especially with ADHD and conduct disorders, which represent the main targets of differential diagnosis.

Although DSM provides limited criteria to correctly diagnose this disorder both in children and teenagers, bipolar disorder has a growing frequency in this category of age.

Therefore, to improve and adapt the criteria for the correct diagnosis of bipolar disorder in children and teenagers, but especially preschool children represents a necessity. Clearly, better definition of subtypes and extend the idea of bipolar disorders increase the accuracy of proper diagnosis of this disease in children.

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