

Bipolar Affective Disorder In Adolescents

REVIEW

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Abstract

Bipolar disorder (BD) is a chronic condition characterized by mood swings that is not rarely presented in adolescents. The presence of comorbid disorders is believed to affect negatively the patient's state. It has been investigated predictors and risk factors for this disease and it might be a path to get more understanding about the psychopathology underneath the BD. The concomitant substance use disorders in a bipolar individual are a challenge to achieve a successful treatment. The diagnosis of BD is still not clearly established, as well as the most effective treatment is still controversial and undefined. Suicide in a depressive frame of bipolar disorder is one of the biggest concerns for the medicine field.

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Bipolar disorder which is not uncommon in youth [1, 2] is often characterized by continuous, rapid-cycling, irritable, and mixed symptoms of depression and mania or hypomania. It may co-occur with disruptive behavior disorders, particularly attention deficit hyperactivity disorder (ADHD) or conduct disorder [1, 3].

Similar to adults with BD, youth can be diagnosed with several subtypes of bipolar disorders including BD-I (periods of mania and major depression), BD-II (episodes of hypomania and major depression), Mixed episodes (symptoms of mania and depression occurring within the same 2-week time frame), cyclothymia (periods of hypomania and

mild depressions), and BP-not otherwise specified (BP-NOS) [4, 5, 6, 7, 8, 9, 10, 11].

In early-onset bipolar disorder, the onset of symptoms occurs before 18 years of age [11, 12, 13, 14, 15]. These patients suffer long-term consequences that substantially impair their ability to perform normal functions of daily life, consequently having devastating impact on their school performance, family relationships, and social interactions [11, 16].

The exact prevalence of pediatric bipolar disorder is unknown, but it is estimated that bipolar spectrum conditions may affect 2% of children and adolescents worldwide [11, 17, 18]. Half to two-thirds of patients with bipolar disorder have their first mood episode before age 18 [19-21], and pediatric bipolar disorder is highly recurrent [19].

The early signs that predict the continued course of adolescent mood disorders are not well established. Thus, we do not know which adolescents with a mood disorders will develop BD, major depressive disorder (MDD), or neither as adults [22]. Adolescent BP is associated with early signs such as mood lability or swings, anxiety, hyperarousal, somatic complaints, behavioral dysregulation, attention difficulties and school problems [22, 23, 24, 25, 26, 27, 28]. Disruptive behavioral disorders, in combination with mood changes, have been identified as more specific markers of the early onset of BPD [23, 29, 30, 31, 32, 33]. It has also been found that the presence of anxiety disorders, especially panic disorder, might be a marker as well [23, 34, 35, 36, 37].

Studies have described a number of correlates of comorbid substance use disorders (SUD) among adolescents with BP, including older age, panic disorder, oppositional defiant disorder/conduct disorder (ODD/CD), psychosis, family history of SUD, and previous alcohol experimentation [38, 39, 40, 41, 42]. The presence of comorbid SUD poses a substantial challenge in the treatment of patients with severe mental disorders [43, 44]. Comorbid SUDs are associated with more severe psychotic and depressive

symptoms [43, 45, 46], more frequent hospitalizations [43, 47], more involuntary hospitalization [43, 48], and poorer treatment response and outcome [43, 49, 50]. Most studies of comorbidity between severe mental disorders and SUD are based on data from surveys or clinical samples. Results from representative US population surveys have indicated that 30-50 % of individuals with psychotic illness [43, 51, 52] or affective mood disorder [43, 53, 54] have a comorbid alcohol use disorder (AUD) or non-alcohol drug use disorder (DUD). More recently, two smaller clinical studies from Scandinavian populations have reported similar results with prevalences of 20-30 % for SUD in schizophrenia [43, 55, 56] and bipolar disorder [43, 50, 57].

Youth can be diagnosed with mania or hypomania using the existing Diagnostic and Statistical Manual of Mental Disorder (DSM) criteria for adults [58, 59, 60, 61, 62, 63, 64]. Diagnosis of Bipolar spectrum disorders (BPSD) in youth remains a difficult but important clinical responsibility. Assessment strategies are needed that are inexpensive, easy to implement, have good predictive power, and simultaneously combine multiple pieces of clinical information to increase or decrease the probability of BPSD [65, 66].

Research into the treatment of BD in children and adolescents has increased in recent years, especially regarding the use of Second-Generation Antipsychotics (SGAs). However, many uncertainties remain. Current algorithms suggest starting with monotherapy and then progressing to combination treatment with two different classes of drugs [67]. To control mood episodes and prevent relapse, these pediatric patients require careful treatment [10, 68]. Pharmacotherapeutic options for treating bipolar disorder in adolescents now also include several atypical antipsychotics [10, 69] with four medications currently approved for this population by the US Food and Drug Administration (FDA): aripiprazole, olanzapine, quetiapine, and risperidone. The emergence of atypical antipsychotics has provided

treatments with fewer neurological side effects and greater tolerability [10, 70].

Although no specific SGA has proved to be more effective than others, available meta-analyses and comparative studies of RPCTs suggest that SGAs are more effective than traditional mood stabilizers. Furthermore, a head-to-head comparison of risperidone vs. lithium and divalproex showed that risperidone was superior in terms of efficacy, but with more metabolic side effects [67, 71].

Until recently, patients with bipolar disorder were rarely offered psychological therapies. The treatment of bipolar disorder is challenging as it does not only aim at resolving acute episodes, but also at preventing recurrences and assuring complete inter-episode recovery in terms of symptom remission and restoration of functioning. There is evidence from randomized, controlled trials that psychotherapy is an effective adjunct to medication in relapse prevention and episode stabilization among bipolar patients [72]. According to a recent meta-analysis, there is a significant reduction in relapse rate with adjunctive psychotherapy compared to standard treatment alone [72, 73]. A recent systematic review concluded that as adjuncts to medication cognitive-behavioural therapy (CBT) and family-focused therapy (FFT) are efficacious with respect to the reduction of depressive symptoms, with interpersonal and social rhythm therapy (IPSRT) possibly efficacious [72, 74].

The ability to recognize facial emotional expressions is a fundamental skill that is necessary for successful social interaction and mood regulation. Borzorg et al. confirmed that adolescents with BD showed overall deficits in the accurate identification of emotions. The detection of emotion was significantly lower in the patient group compared to normal adolescents while they were viewing angry faces. This ability was also (nearly significant) lower while they needed to recognize sad and happy faces. Moreover, the time taken to detect emotional faces was longer in adolescents with BD compared

to the normal developing adolescents. This process was particularly slower in identifying happy and neutral faces. These findings could be interpreted that youths with bipolar disorder have some problems in recognizing emotional faces in terms of accuracy and speed even when they are free from acute symptoms [1].

There are a few comorbid disorder associated with Bipolar Disorder. The scarce literature available suggests that Attention-deficit/hyperactivity Disorder (ADHD) and BD might share or promote synergistic neuropsychological deficits when comorbid. Children and adolescents presenting BD and comorbid ADHD show greater impairment in speed processing and interference control [75]. Also, there is conduct disorder (CD) comorbidity, the most important negative predictor of treatment nonresponse in BD children and adolescents [76, 77]. Youth with CD and BD presented higher rates of global aggression at the baseline, namely impulsive aggression, compared with those with either BD or CD alone, more frequent substance abuse, and poorer response to treatments [76, 78].

Patients with bipolar disorder have elevated mortality rates in comparison with the general population [79, 80]. The excess mortality can be subdivided into deaths from avoidable causes and other deaths that are termed "unavoidable" [79, 81]. Suicide is a leading cause of avoidable deaths in bipolar disorder. Comorbid alcohol and drug abuse must be identified and treated since it elevates the risk for suicide [79, 82]. Lithium and anticonvulsant maintenance treatments have been the mainstays of suicide prevention in patients with major affective disorders [79, 83]. The evidence supports the efficacy of cognitive behavioural therapy (CBT), in combination with pharmacological treatment for the prevention of relapse and of suicidal behavior [79, 84].

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