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## Comorbid bipolar disorder and obsessive-compulsive disorder: state of the art in pediatric patients

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### To the editor:

Apparent comorbidity between bipolar disorder (BD) and anxiety disorders is a common condition in psychiatry,<sup>[1,2]</sup> one of the most difficult to manage being the co-occurrence of BD and obsessive-compulsive disorder (OCD).<sup>[3,4]</sup> In 1860 French psychiatrist Bénédict-Augustin Morel first described patients with symptoms typical of what is now considered comorbid BD and OCD.<sup>[5]</sup> A century later, when categorizing mental illnesses based on the course of illness, Mayer-Gross and colleagues included BD-OCD patients within the group of manic-depressive disorders.<sup>[6]</sup> Our Forum in the last issue<sup>[7]</sup> discussed the question of comorbid bipolar disorder (BD) and obsessive-compulsive disorder (OCD) and concluded that the weight of the evidence supported the view that the majority of these BD-OCD cases were, in fact, a subtype of BD, not two separate co-occurring disorders.

We would like to bring the attention of readers to another line of evidence that supports this conclusion – studies of BD and OCD in pediatric populations. Although recent studies have assessed the prevalence of the co-occurrence of anxiety and bipolar disorders, the topic remains insufficiently studied, particularly in pediatric populations.<sup>[8]</sup> However, some observations can be made from the available scientific evidence.

1. Subgroup analysis in our previous meta-analysis<sup>[9]</sup> found that the pooled prevalence of comorbid OCD in 345 children and adolescents (mean [sd] age, 12.7 [2.5] years) with BD from four studies was 23.2% (95% CI, 11.5 to 41.3%), much higher than the 12.6% (95% CI, 10.4 to 16.3%) comorbidity rate of OCD in the pooled sample 4539 of adults with BD from 22 studies.

2. More than 60% of BD-OCD patients experience the onset of OCD prior to the onset of BD, in 25% the onset of OCD is simultaneous with the first episode of BD, and in the remaining 15% the first episode of BD precedes the onset of OCD. Some reports suggest that compared to patients with single-diagnosis OCD, those with comorbid BD-OCD tend to have an earlier onset of their OCD symptoms.<sup>[10]</sup>
3. Compared to single-diagnosis OCD pediatric patients, BD-OCD pediatric patients are more likely to have a family history of mood disorders and less likely to have a family history of OCD. Moreover, a family history of mood disorders is reported to be more frequent in patients with episodic OCD than in those with continuous or chronic OCD symptoms.<sup>[7]</sup>
4. All BD-OCD pediatric patients identified in our meta-analyses<sup>[9]</sup> received mood stabilizers (lithium, divalproex sodium). Among these BD-OCD pediatric patients, 42.1% required a combination of multiple mood stabilizers and 10.5% required a combination of mood stabilizers with an atypical antipsychotic medication (quetiapine, risperidone, aripiprazole).<sup>[11]</sup>
5. Compared to single-diagnosis BD patients, the use of antidepressants are more likely to precipitate manic or hypomanic episodes in patients with comorbid BD and OCD.<sup>[11]</sup>

As suggested in a recent study,<sup>[12]</sup> OCD symptoms in childhood and adolescence may be markers of vulnerability to subsequent episodes of BD. If true, this would indicate partially shared etiopathogenetic mechanisms between the two disorders.

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The course of illness of pediatric patients with comorbid BD-OCD also supports the conclusion that this comorbid condition is a subtype of BD. Typically, OCD symptoms initially coexist with BD symptoms and may even cycle with mood symptoms. They usually (and sometimes exclusively) appear during BD depressive episodes and remit during BD manic or hypomanic episodes. In most pediatric patients with comorbid BD-OCD, the OCD symptoms gradually decrease with increasing age and the BD symptoms become more prominent. If true, this would explain the much higher prevalence of comorbid BD-OCD in pediatric BD patients than in adult BD patients.

Further studies are needed to confirm or refute our findings and to help determine the best treatment strategies for pediatric patients with comorbid BD-OCD. In particular, longitudinal family studies and genetic studies that identify the hereditary and biological markers of comorbid BD-OCD are needed to clarify

the degree of overlap between the pathogenetic mechanisms underlying this comorbid condition and the pathogenetic mechanisms underlying the two component conditions.

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