

Case Report

Comorbid Bipolar Affective Disorder and Obsessive Compulsive Disorder in Childhood: A Case Study and Brief Review

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ABSTRACT

Obsessive compulsive disorder and bipolar affective disorder in the pediatric population show a bidirectional overlap. Few studies that have addressed this issue show that the prevalence of obsessive compulsive disorder in bipolar affective disorder patients ranges from 0 to 54%, and 1.85 to 36% of the obsessive compulsive disorder patients have a comorbid bipolar affective disorder. We report a case of a patient with an onset of obsessive compulsive disorder at two-and-a-half years of age, who developed mania after exposure to escitalopram. We suggest that in pediatric obsessive compulsive disorder cases, antidepressants be used with caution, especially in cases with a positive family history of bipolar affective disorder.

Key words: *Bipolar affective disorder, childhood, obsessive compulsive disorder*

INTRODUCTION

Childhood mental disorders are known for their associated comorbidities; childhood bipolar affective disorder and obsessive compulsive disorder are no different. They are marked with multiple comorbid anxiety disorders, mood disorders, and disruptive behavior disorders. It was once considered that bipolar comorbidity in obsessive compulsive disorder was rare and a systematic investigation in this area was not done until recently.^[1] Even today, there is a dearth of literature in this area, when childhood population is

considered. We report the case of a child presenting with obsessive compulsive disorder and bipolar disorder at a very young age. A review of the relevant literature has been undertaken, to compile the information on comorbidity of bipolar disorder and obsessive compulsive disorder in childhood. A Pubmed search was done using the keywords, 'childhood', 'adolescent', 'obsessive compulsive disorder', 'bipolar disorder', 'antidepressant-induced mania / hypomania,' and relevant articles were retrieved supplemented with a manual search of cross-references.

CASE REPORT

The index patient, a four-year-old male, from a rural background of eastern India, presented with irritability for 18 months. He would frequently gesticulate as if he was brushing something off his clothes. He would say, "chhiya gaya hai" (local dialect of Hindi, meaning: "there's filth on my clothes and body") whenever someone would touch him and would be irritated. In

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the seven months prior to presentation he used to urge his family members to wash his dresses with detergent repeatedly. After being touched by someone he would insist on getting bathed, using an unusually excessive amount of water, and taking a long time before he would let the attendant take him out of the bathroom. He would also repeatedly touch the private parts of the female members of the family. Another noted feature was his habit of repeatedly hitting himself or biting his body parts. On asking about these he would not provide any explanation, but would say that he did not like doing these. There was a family history of bipolar disorder in the maternal grandfather. However, the birth, prenatal, postnatal, and developmental history was unremarkable. When admitted in hospital, there were few occasions of tearfulness. He would often demand that the bed sheets and linens be washed several times a day, as they were not satisfactorily clean. The self-injurious behaviors also continued. Entertaining a diagnosis of obsessive compulsive disorder he was started on escitalopram 5 mg per day and behavioral intervention was done for the self-injurious behaviors. He showed improvement in his overall condition and was discharged on that regime. At follow-up after four months, he showed increased goal-directed behaviors, an unusual cheerful mood, and the parents reported increased socialization. The diagnosis of obsessive compulsive disorder with mania was made; he was re-admitted, escitalopram was stopped and tablet lithium 600 mg per day was started, and was increased to 750 mg (serum level 0.92 mmol / l) along with tablet risperidone 1 mg per day. On this regime the manic symptoms improved significantly. Risperidone was reduced to 0.5 mg for increased sedation. He was

discharged on lithium 750 mg and risperidone 0.5 mg per day.

DISCUSSION

Childhood bipolar affective disorder is different from the adult counterpart for its different clinical presentation (protracted irritability with frequent violent outbursts, confusing the picture with disruptive behavior disorder) and course (chronic and continuous rather than acute and episodic). It is also marked with frequent comorbidities and anxiety disorders, it often shows a bidirectional overlap.^[2] There have been few studies investigating the comorbidities of anxiety disorder in childhood and adolescent bipolar disorder, which are summarized in Table 1.^[1,3-8] These studies show that the prevalence of obsessive compulsive disorder in bipolar affective disorder cohorts, range from 0 to 54%. Among other comorbidities, separation anxiety disorder, generalized anxiety disorder, and attention deficit/hyperactivity disorder figure, prominently. However, most of the studies were flawed by the selection and referral bias and the recall bias of patients and their guardians. Also, there have been studies in pediatric obsessive compulsive disorder patients, where comorbid bipolar disorder has been assessed, which are summarized in Table 2.^[9-14] Among the primary obsessive compulsive disorder cases, bipolarity has been seen in 1.85 – 36% of the patients, and in those patients, the overall severity is higher, they respond poorly to medications, and in them, the age of onset of obsessive compulsive disorder is earlier than in the cases of pure obsessive compulsive disorder patients.

Table 1: Summary of studies assessing comorbid obsessive compulsive disorder in childhood and adolescent bipolar affective disorders

Study	Sample	Study characteristics	OCD prevalence	Other information
Lewinsohn <i>et al.</i> ^[3]	Random samples of 1709 adolescents; 18 BAD cases	Two-time assessment of samples	0.0%	Highest prevalence among comorbid conditions: Separation anxiety disorder (22.2%)
Masi <i>et al.</i> ^[4]	43 adolescent outpatients; mean age 14.9±3.1 years	Naturalistic, prospective	44.2%	Prevalence of OCD in childhood onset of BAD was 40%, and 47.8% in adolescent onset of BAD
Tillman <i>et al.</i> ^[5]	93 consecutive new cases; aged 7 – 16 years	Two-year follow-up	24.7%	Age of onset of first episode mania was 6.8±3.4 years; earliest onset of comorbidity: ADHD (4.8±1.5 years)
Masi <i>et al.</i> ^[6]	59 consecutive patients; mean age 14.6±3.3 years	Naturalistic follow-up study	48.9%	Mean number of anxiety disorders was higher in BAD patients with comorbid CD. Only OCD was significantly more frequent in BAD without CD
Masi <i>et al.</i> ^[11]	Total 102 patients with mean age 14.2±3.2 years; 30 patients with OCD+BAD	Naturalistic, prospective	Not reported†	When OCD was comorbid with BP, age of onset was significantly earlier than in the 'pure' OCD patients. Age of onset of BP was unaffected by comorbid OCD
Masi <i>et al.</i> ^[7]	Total 98 referred patients (mean age 13.7±3.0 years)	Six months follow-up	54.1%	Prevalence of OCD in BAD with ADHD patients was 16.1%
Masi <i>et al.</i> ^[8]	136 referred patients (mean age of 13.5±2.9 years)	Naturalistic study based on clinical database	50.6% in episodic and 35.6% in chronic BAD	In both, elated mania and irritable mania group, prevalence of OCD was highest (45.3 and 42.6%, respectively) followed by GAD (32.0 and 34.4%, respectively)

BAD - Bipolar affective disorder, CD - Conduct disorder, ADHD - Attention deficit hyperkinetic disorder, OCD - Obsessive compulsive disorder, GAD - Generalized anxiety disorder, †Among the pure OCD, pure BAD and BAD with OCD patients, the third group comprised of 29.4%

Table 2: Summary of studies assessing bipolar affective disorder comorbidity in childhood and adolescent obsessive compulsive disorder

Study	Sample	Study characteristics	BAD prevalence	Remarks
Leonard <i>et al.</i> ^[9]	Consecutive 54 patients with mean age of 17.4±3.0 years	Prospective follow-up study	22% had affective disorder †	The most common of affective disorders was major depression (54%)
Geller <i>et al.</i> ^[10]	Consecutively referred 30 patients (mean age 12.6±2.9 years)	Naturalistic study with no exclusion criteria	27%	Among patients with comorbid ADHD, the prevalence of BAD was higher
Reddy <i>et al.</i> ^[11]	54 self referred patients aged ≤ 16 years	Cross-sectional study	1.85%‡	Mean age of onset of OCD was 10±1.8 years
Masi <i>et al.</i> ^[12]	Consecutive 94 referred patients (mean age (13.6±2.8 years)	Naturalistic follow-up study	24.5%	Risk of BAD was highest (57.1%) with patients with hoarding compulsions. Higher rate of BAD in non-responders
Masi <i>et al.</i> ^[13]	Consecutive 94 referred patients (mean age (13.6±2.8 years)	Naturalistic follow-up study	17.1% in pure OCD; 45.8% in OCD with ADHD	Earlier age of onset for OCD in OCD with ADHD patients Risk for BAD is higher in early onset OCD
Masi <i>et al.</i> ^[14]	Consecutive series of 120 patients (mean age 13.7±2.8 years)	Naturalistic follow-up study based on clinical database	35.8%	The OCD patients with comorbid BAD had earlier age of onset for OCD; severe symptomatology and poor response to treatment

BAD - Bipolar affective disorder, CD - Conduct disorder, ADHD - Attention deficit hyperkinetic disorder, OCD - Obsessive compulsive disorder, GAD - Generalized Anxiety disorder, MDD - Major depressive disorder, †Both MDD and BAD; ‡Prevalence of mood disorder was 11%

Antidepressant-induced manic / hypomanic switches in primary obsessive compulsive disorder cases have been very rare, especially in the pediatric population.^[15,16] The selective serotonin reuptake inhibitors (SSRIs) impose a lower risk in inducing a manic / hypomanic switch, compared to other antidepressants.^[17] Cyclothymic and episodic variants of obsessive compulsive disorder have been described in adults, which are pointers toward latent bipolarity.^[18-21] However, there has been no study addressing these issues in children or in the adolescent population. In our case the age of onset of obsessive compulsive disorder was two-and-a-half years. To the best of the authors' knowledge this is one of the youngest patients with obsessive compulsive disorder ever reported. He also developed mania around four months after exposure to escitalopram. A positive family history of bipolar disorder has been seen in our case, which might have paved the way for the onset of bipolarity in this case of a child who initially presented with obsessive compulsive disorder.

Bipolar affective disorder and obsessive compulsive disorder comorbidity is not uncommon in children or the adolescent population, although studies addressing this issue have been scarce. In our opinion, an index of suspicion for bipolarity is always required in childhood obsessive compulsive disorder cases with a family history of bipolar disorder, and the use of antidepressants in these cases has to be judicious.

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