Review Article

Obsessive-compulsive disorder and bipolar disorder comorbidity

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Bipolar disorder and obsessive-compulsive disorder is often seen together. The prevalence rate of this comorbidity can be as high as 15–35%. This comorbidity alters the presentation and course of both disorders. Rate of comorbidity with other psychiatric disorders along with substance abuse also increased significantly. Increased frequency of suicidal ideation leads to increased mortality in this population. Treatment requires adequate mood stabilization, judicious use of anti-obsessive medicines with close monitoring for manic/hypomanic switch.

KEY WORDS: Bipolar disorder, mood stabilizer, obsessive-compulsive disorder

INTRODUCTION

In clinical practice, we often encountered patient who exhibits symptoms of both bipolar disorder (BD) and obsessive-compulsive disorder (OCD). This simultaneous occurrence often poses many challenges to treating psychiatrists as it effects clinical presentation, course, treatment outcome, and prognosis significantly. Furthermore, selective serotonin rreuptake inhibitor (SSRIs), mainstay of treatment in OCD, increases the chances of precipitating manic/hypomanic symptoms, thus further compounding the clinical dilemma.[1] In this article, we shall discuss clinically relevant aspects of BD and OCD comorbidity.

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EPIDEMIOLOGY

As for as the scientific literature suggests, this cooccurrence is anything but by chance. For the first time, this higher-than-expected cooccurrence between OCD and BPD came in 1991 from the epidemiological catchment area study, with 23% of BD subjects also had OCD.[2] Later on, subsequent studies also reported comorbidity rate as high as 15–35%.[3] Amerio *et al*., in 2015, in his meta-analysis found that 17% of BD patients had OCD, and 18% of OCD patients were also having BD.[4]

Lifetime comorbidity rate was found up to 21.5% in clinical and epidemiological studies.[5,6] When we use a wider concept of bipolar spectrum, then almost 50% of OCD cases manifest bipolar symptoms in their lifetime.[5]

The prevalence of OCD in general population is 1.5–2.3% where as in patients with BD 9–35% of patients also have OCD.[7,8] In large sample hospital-based studies, the same prevalence ranged between 3% and 16.3%,[9-11] while data from

patients in remission reported prevalence of comorbid OCD is 35–38.6%. This high prevalence of OCD during remission indicates that symptoms of OCD may be masked by the presence of mood symptoms.[12,13]

CLINICAL PRESENTATION

First of all, it is very important to differentiate obsessions from depressive ruminations and compulsions from repeated goal-directed activities of mania. Patients with BD often experience higher levels of rumination, even during remission.[14] Depressive ruminations are usually about negative events in life, and often focuses on failures, guilt, pessimism, and self-criticism. As opposed to obsessions, they are mood-congruent, and not perceived as intrusive, senseless, and distressing. Furthermore, they are not associated with compulsions as in OCD.[15]

As for as temporal relationship of both symptoms is concerned, some studies suggest that OCD is an antecedent of BD,[16] but others report concurrent onset of OCD and BD.[17,18]

OCD in such patients often show episodic course with symptoms worsening during depression or remission and symptom improvement during manic or hypomanic phases.[9,16] The usual chronic course of OCD also seen in a substantial number of patients.[10,19] Perugi *et al*. found that this episodic course is more common in type II BD.[20] There is evidence that SSRIs induced mania/hypomania is more common in patients with BD-OCD comorbidity.[5]

A recent Indian study reported that more than two-thirds of subjects with this comorbidity have worsening of OCS in manic phase of illness, none of their subjects had improvement in manic phase, and the OCD was severe on YBOCS.[11]

This cooccurrence also affects the phenomenology of OCD. Aggressive, sexual, and religious obsessions are more common. Hoarding and ordering/arranging compulsions are also more common.[21] OCD is often more severe when mood symptoms are present,[11] but in remitted bipolar-OCD patients, severity of OCD is found to be less compared to pure OCD.[13] Poor insight,[9] frequent hospitalizations, and complex pharmacological interventions[6,17] are other characteristics of this population.

OCD is more commonly observed in patients with Type II BD (as high as 75%)[20] and in patients with mixed manic episode than patients with pure mania.[7] The presence of OCD comorbidity predicts a more chronic course of BD and greater frequency of major depressive episodes.[19] Furthermore, such patients often have a more severe form of BD, more prolonged episodes, rapid cycling,[22] more frequent hospitalizations,[9] less adherent to medication, and show poor response to mood stabilizers.[13,18] These patients also have poor functioning, greater disability, poorer quality of life, and higher unemployment.[9,11,22]

Substance abuse such as sedative, nicotine, alcohol, and caffeine are more common as well.[17,18,22]

Bipolar subjects with OCD were more likely than those without OCD to have higher lifetime rates of suicidal ideation, suicide attempts, and of suicide. In adolescent with BD, comorbid OCD increases the suicidal ideation. Thus, OCD accounts for high mortality in BD.[6,8,9,12,22]

Furthermore, odds of comorbidity with other psychiatric disorders also increased. Higher rates of comorbid dysthymia,[12] panic disorder, agoraphobia, social anxiety disorder, substance use disorders,[11,16] GAD, and eating disorders[23] are seen. Certain axis II disorder such as narcissistic and antisocial personality disorders also found more than usual.[6,17]

BIOLOGICAL MECHANISM

Family members of patients with BD have higher rates of OCD which points toward a possible familial or genetic association.[24]

Further support for the hypothesized common etiology comes from a preliminary molecular genetic study which found that hyperpolarization activated cyclic nucleotide-gated channel 4 (HCN4) is a common susceptible locus for both mood disorders and OCD.[25]

A study using positron emission tomography found that the serotonin-transporter binding potential in the insular and dorsal cingulate cortex was higher among bipolar patients with OCD than among bipolar patients without OCD.[26]

Only a single study examined the biological marker of BD-OCD comorbidity. This study points out that 5-HTT binding potential in BD-OCD is closer to that of BD and opposite to that of OCD and MDD (i.e., increased in insula, dorsal cingulate just like in BD and decreased in thalamus just opposite of OCD, and decreased in midbrain just opposite to MDD).[27,28]

OCD-BD patients may have increased glutamate level in caudate, left dorsolateral prefrontal cortex, reduced level in orbitofrontal cortex, and normal in anterior cingulate cortex. Although no study has focused on glutamate hypothesis of BD-OCD comorbidity so far, studies of pharmacological interventions targeting glutamate have been in progress, both in BD and OCD. Hence, glutamatergic drugs may be of promising effects in BD-OCD comorbidity.[15]

Another aspect of shared neurobiology can be understood from the efficacy of antipsychotics in both disorders. In treatment-refractory OCD, serotonin receptors are downregulated by chronic SSRI use, and consequently, the blockade of serotonin receptors by atypical antipsychotics may potentiate the action of the SSRI. SSRI-refractory OCD has additional abnormalities in dopaminergic function that requires augmentation with dopamine-blocking drug.[28]

TREATMENT

The main issue in management in these patients revolves around the use of SSRIs as anti-obsessive agents may induce manic episodes, destabilize the bipolar illness.[1]

During an acute mania or mixed episode, the treatment of mood symptoms takes precedence and adequate mood stabilization must be achieved before anti-obsessive agents are used. Drug treatment of OCD should be deferred unless it is very severe.[21]

During the remission phase, subclinical obsessive-compulsive symptoms should be treated preferably with cognitive-behavioral therapy (CBT), along with adequate mood stabilization. Clinically significant OCD also needs to be treated with CBT first, and if CBT is ineffective or not feasible, an anti-obsessive agent may be used under cover of mood stabilizers and/or atypical antipsychotics while monitoring for manic/hypomanic switch and cycle acceleration.[9,29]

CONCLUSION

BD and OCD often encountered together in clinical practice. In this scenario of comorbidity, OCD tends to have episodic course, more severe symptoms, poorer insight, and more frequent hospitalization. Aggressive, sexual, and religious obsessions are more common and hoarding, ordering/arranging compulsions occur more frequently. On the other hand, this BD to have a more severe form of BD, and associated with more prolonged episodes, rapid cycling, more frequent hospitalizations, irregular compliance, and poor response to mood stabilizers.

Comorbidity of other psychiatric disorders is common. Substance abuse and suicidal ideation/act occur at a higher frequency. Adequate mood stabilization is necessary while treating the patients. CBT is preferable for the treatment of OC symptoms. The use of antidepressants should be discouraged due to their mania/hypomania inducing property. If necessary, SSRI may be used with mood stabilizers and/or atypical antipsychotics with close symptom monitoring.

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