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Comorbid obsessive–compulsive disorder with bipolar disorder: A distinct form?

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ABSTRACT

We examined whether the patients with Bipolar Disorder (BD) and Obsessive–Compulsive Disorder (OCD) comorbidity may represent a distinct form of BD. The subjects diagnosed with BD ($n=48$), OCD ($n=61$), and BD with OCD ($n=32$) were compared in terms of several socio-demographic and clinical characteristics. Previous history of suicidal attempts was more likely to be higher in BD–OCD group compared to the other two groups. A more episodic course of OCD, higher rates of rapid cycling, and the seasonality were found in BD–OCD patients. The frequency of bipolar II and NOS subtypes was more prevalent in patients with BD–OCD than in OCD patients. The first diagnosed illness was BD in the majority of BD–OCD cases. It was found that first affective episode was major depression in half of BD–OCD patients. Age at onset of BD was found to be earlier in BD–OCD group compared to pure BD patients. Bipolarity may not have a specific effect on the phenomenology of OC symptoms. The episodic course of OCD, seasonality, rapid cycling, earlier onset of BD, and impulsivity in BD–OCD patients may be indicative for a distinct form of BD.

1. Introduction

The nature of the relationship between Obsessive–Compulsive Disorder (OCD) and Bipolar Disorder (BD) is not exactly known. Studies have demonstrated that 2–39% of patients with BD have a comorbid diagnosis of OCD (Chen and Dilsaver 1995; Krüger et al., 2000; Joshi et al., 2010; Magalhaes et al., 2010; D'Ambrosio et al., 2010; Dell'Osso et al., 2011; Amerio et al., 2014; Shashidhara et al., 2014). BD was reported to affect a range of 1–23% of clinical OCD samples (Perugi et al., 1997; Nestadt et al., 2001; Ruscio et al., 2010; Joshi et al., 2010; Timpano et al., 2012; Amerio et al., 2014).

Previous research suggests that OCD is most commonly associated with BD II (Perugi et al., 1999; Krüger et al., 2000). The OCD patients with BD experience a more episodic course of OCD (Perugi et al., 1997; Tukel et al., 2006, 2007; Zutshi et al., 2007; Mahasuar et al., 2011). These patients are more likely to have a history of rapidly cycling BD (Magalhaes et al., 2010), higher number of depressive episodes, greater suicidality, and a higher rate of hospitalization (Perugi et al., 2002; Mahasuar et al., 2011). OCD bipolars have a significantly higher rate of sexual, religious and symmetry obsessions and repeating, counting and ordering/arranging compulsions (Perugi et al., 1997; Masi et al., 2004; Hasler et al., 2005). OCD is known to worsen in depressive phase and improve during hypomania/mania (Gordon and Rasmussen, 1988; Perugi et al., 1997; Zuthsi et al., 2007). A recent study reported that BD–OCD patients had higher rates of comorbid social anxiety and avoidant personality disorder and OCD in first-degree relatives (Shashidhara et al., 2014). To our best knowledge, the impulsivity among patients with comorbid diagnoses of BD and OCD have not been previously studied. Some of the studies reported that BD is associated with impulsivity (Swann et al., 2009). The patients with BD exhibit an increased impulsivity during manic and euthymic states (Strakowski et al., 2010).

In this study, our primary aim was to investigate how the patients with BD and OCD comorbidity would differ from those with pure OCD and BD. For this purpose, we examined the various socio-demographic and clinical characteristics of patients with comorbid diagnosis of BD and OCD in comparison to patients with pure BD and OCD. In addition to well known factors which are associated with BD and OCD comorbidity, we hypothesized that several other factors such as rapid cycling, seasonality, and impulsivity would differentiate between BD patients with and without OCD.

2. Methods

2.1. Subjects and assessment

We recruited subjects from January to July 2014 at the psychiatry out-patient clinics of Adnan Menderes University Hospital. Consecutively, the patients

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Table 1
The comparisons of socio-demographic and clinical characteristics among BD, BD–OCD, and OCD groups.

	BD ($n=48$)		BD–OCD ($n=32$)		OCD ($n=61$)		Statistical analyses		
Variables	*N*	%	*n*	%	*N*	%	χ^2	df	*P*
Gender							1.78	2	0.41
Female	25	52.1	16	50	38	62.3			
Male	23	47.9	16	50	23	37.7			
Marital status							7.94	2	0.09
Single	15	31.3	14	43.8	21	34.4			
Married	26	54.2	15	46.9	39	63.9			
Divorced/separate	7	14.6	3	9.4	1	1.6			
Previous history of suicidal attempts	10	20.8	15	46.9	7	11.5	15.13	2	0.001
	Mean	SS	Mean	SS	Mean	SS	*F*	df	*P*
Age	42.3	12.4	36.2	12.0	37.7	12.9	2.81	2	0.06
Educational level (years)	10.4	6.6	12.3	3.5	10.6	3.9	1.65	2	0.19
Barratt impulsivity scale									
Total	62.6	11.7	66.4	11.8	57.7	11.5	6.08	2	0.003
Attentional	15.3	3.1	16.3	3.4	15.1	4.1	1.10	2	0.33
Motor	20.2	4.1	21.5	5.2	17.9	4.6	6.94	2	0.001
Non-planning	27.4	5.2	28.5	5.4	24.4	4.9	8.01	2	0.001

consulted for BD with ($n=32$) and without OCD ($n=48$), and the subjects diagnosed with OCD ($n=61$) participated in the study. There was no comorbid patient with a primarily diagnosis of OCD. All the participants were between the ages of 18 and 65. Patients were interviewed after a resolution of acute mania. The subjects who could not maintain the interview, or complete the scales because of the severe manic symptomotology did not include into the study. The exclusion criteria were any psychotic disorder, organic mental disorder and mental retardation. Since the symptoms of OCD and BD may be induced by misuse, intoxication, or withdrawal from a particular substance or drug, current diagnoses of substance or drug use disorders were also not included in the study.

A semi-structured intake interview, ascertained participants' demographic characteristics, including: age, sex, years of education, and marital status. We also obtained information on several clinical variables such as previous history of suicidal attempts (a report of the suicidal attempt at any time in life), age at onset of the disorders (the earliest age that the patient remembered having OCD and BD symptoms), and family history of OCD and BD. The seasonality (where most episodes start and end around the same time each year), and rapid cycling (four or more mood episodes per year) among BD patients were also recorded. We examined bipolar I and bipolar II subtypes, and BD NOS that developed manic or hypomanic episodes while on antidepressant treatment. During the assessment, all patients were under the treatment of mood stabilizers, antidepressants or antipsychotics. The study was approved by the local Institutional Review Board, and informed consent was obtained from all participants after the study was fully explained to them.

The lifetime diagnoses of BD and OCD were assessed by an experienced clinician through the Structured Clinical Interviews for Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) Axis I Disorders (SCID-I) (First et al., 1997; Özkürkçügil et al., 1999). On the basis of DSM-IV criteria, the current clinical status for BD patients were determined as euthymia (Beck Depression Inventory-BDI ≤ 17; Young Mania Rating Scale-YMRS ≤ 12), major depression (BDI ≥ 17), hypomania/mania (YMRS ≥ 12), or mixed episodes. The BD–OCD and pure OCD patients were applied Yale–Brown Obsessive Compulsive Scale (YBOCS) (Goodman et al., 1989) to determine the severity of current Obsessive–Compulsive Symptoms (OCs). The YBOCS score range of severity for patients were: 0–7, subclinical; 8–15, mild; 16–23, moderate; 24–31, severe; 32–40, extreme. The types of OCs were identified using Y-BOCS symptom checklist.

We determined the course of OCD applying the following definitions which were used in some of the previous studies (Reddy et al., 2005; Zutshi et al., 2006). In chronic form, the symptoms persisted for most of the course, causing an impairment in functioning. Episodic course was associated with a history of remission and relapse. During remission, there were no OCs or at least a subclinical course for ≥ 3 months.

The Turkish version (Tamam et al., 2013) of Barratt Impulsivity Scale (BIS-11) (Patton et al., 1995) was administrated to assess the severity of impulsivity in the all participants. This scale has 30 questions, each of which required the responder to choose between 'rarely/never', 'Occassionally', 'Often' and 'almost always'. It consists of subscales of Attentional Impulsiveness (AI), Motor Impulsiveness (MI), Non-planning Impulsiveness (NP). Items are scored from 1 to 4.

2.2. Statistical analyses

Statistical analysis was performed by using the Statistical Package for Social Sciences (SPSS) version 17.0. Pearson's χ^2 test was used to compare categorical variables. The continuous variables were analyzed through the independent sample *t* test, or ANOVA (with Bonferroni correction) as appropriate. To avoid type I and type II errors, because of the high number of variables included in the comparative tests, we set the significance level at $p < 0.01$. All test were two-tailed.

3. Results

3.1. Patient characteristics

There were no statistically significant differences between three groups in terms of age, gender, educational level, and marital status. Previous history of suicidal attempts was more likely to be higher in BD–OCD group compared to the other two groups ($p=0.001$). The rate of previous hospitalizations was signifcantly lower in pure OCD group compared to two other groups ($p=0.002$). Following Bonferroni correction, we have found that total, motor, and non-planning subscale scores of BIS-11 were significantly higher in BD–OCD group in comparison to OCD group ($p=0.003$, $p=0.003$, $p=0.001$; respectively) (Table 1).

3.2. BD–OCD vs. OCD

In the present study, the severity of current OCs was assessed through YBOCS in OCD patients. Since some of them had a subclinical or mild level of OCs, these patients were considered as having an active OC symptomotology during the assessment. The two groups did not differ with respect to family history of OCD, the content and the mean number of OCs, and age of onset of OCD. The rates of the patients who had an episodic course tended more likely to be higher in OCD–BD group than in OCD group ($p=0.029$). At the time of assessment, the total ($p < 0.0001$), obsession

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