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Diagnosis of obsessive-compulsive disorder in the course of bipolar disorder

Występowanie zaburzeń obsesyjno-kompulsyjnych w przebiegu choroby afektywnej dwubiegunowej

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Abstract

Aim: The aim of this study was to evaluate the coexistence of obsessive-compulsive symptoms with bipolar disorder (during the manic phase, depressive phase and remission). **Method:** The subjects were 70 patients previously diagnosed with and treated for bipolar disorder. For the purposes of this study, three subgroups were created: patients in the manic phase, depressive phase and in remission. The Hamilton Depression Rating Scale, Young Mania Rating Scale and Yale-Brown Obsessive Compulsive Scale were diagnostic tools used for the evaluation of patients' mental health. **Results:** The data indicate high likelihood of co-occurrence of obsessive-compulsive disorder (28.6%) and obsessive-compulsive syndromes (32.8%) with bipolar disorder. Obsessions and compulsions were observed irrespectively of the type of bipolar disorder (type 1 and 2) and phase of the illness (depression, mania, remission). The results in the three subgroups were similar. The severity of anankastic symptoms depended both on the severity of depression and mania. The subjects confirmed the presence of obsessive-compulsive symptoms in the interview, although they were usually undiagnosed and untreated. **Conclusions:** Obsessive-compulsive disorder symptoms often coexist with bipolar disorder, both in its two phases and in remission. The severity of obsessive-compulsive symptoms in the course of bipolar condition varies, ranging from mild to extremely severe forms. The obsessive-compulsive disorder presentation in the course of bipolar disorder increases with the severity of depressive and manic symptoms. Obsessive-compulsive disorder can be primary to bipolar disorder. Obsessive-compulsive disorder coexisting with bipolar disorder is not diagnosed or treated properly.

Key words: obsessive-compulsive disorder, bipolar disorder, comorbidity

Streszczenie

Cel pracy: Zbadano współwystępowanie zaburzeń obsesyjno-kompulsyjnych w przebiegu choroby afektywnej dwubiegunowej (w fazie depresji, manii i w stanie remisji). **Metoda:** Badaniu zostało poddanych 70 chorych już wcześniej zdiagnozowanych i leczonych w kierunku choroby afektywnej dwubiegunowej. Z grupy wszystkich badanych wyodrębniono trzy podgrupy: badani będący w fazie maniakalnej, depresyjnej i remisji choroby afektywnej dwubiegunowej. Do oceny stanu chorobowego użyto skali depresji Hamiltona, skali manii Younga i skali zaburzenia obsesyjno-kompulsyjnego Yale-Brown. **Wyniki:** Stwierdzono istotną możliwość współwystępowania zaburzeń obsesyjno-kompulsyjnych (28,6%) i zaburzeń o łagodniejszym przebiegu (*obsessive-compulsive syndromes*) (32,8%) w przebiegu choroby afektywnej dwubiegunowej. Natręctwa występowały niezależnie od typu choroby afektywnej dwubiegunowej (I i II) i fazy chorobowej (depresja, mania, remisja), a wyniki w trzech badanych grupach były zbliżone. Intensywność objawów anankastycznych zależała zarówno od nasilenia objawów depresyjnych, jak i maniakalnych. Badani potwierdzili obecność natręctw w wywiadzie chorobowym, chociaż najczęściej nie były one zdiagnozowane i leczone. **Wnioski:** Natręctwa często współwystępują z chorobą afektywną dwubiegunową zarówno w fazach chorobowych, jak i w remisji. Stopień nasilenia zaburzeń obsesyjno-kompulsyjnych w przebiegu choroby afektywnej dwubiegunowej jest różny – od form łagodnych po skrajnie ciężkie. Prezentacja zaburzeń obsesyjno-kompulsyjnych w przebiegu choroby afektywnej dwubiegunowej zwiększa się zarówno z nasileniem objawów depresyjnych, jak i maniakalnych. Zaburzenia obsesyjno-kompulsyjne mogą poprzedzić rozwój choroby afektywnej dwubiegunowej. Zaburzenia obsesyjno-kompulsyjne nie są właściwie współdiagnozowane, a tym samym nie są leczone w przebiegu choroby afektywnej dwubiegunowej.

Słowa kluczowe: zaburzenia obsesyjno-kompulsyjne, choroba afektywna dwubiegunowa, współwystępowanie

INTRODUCTION

The most suitable introduction to the further part of this article can be the unusual observation of Emil Kraepelin who, as early as in 1921, presented not only cases of depressive-anankastic disorders, but also of “anxious mania,” in which one of the most prominent symptoms was obsessive rumination. Currently, correlations between mood disorders and obsessive-compulsive symptoms are too often reduced to problems of so-called anankastic depression, in which obsessions and compulsions accompany depression. According to Gordon and Rasmussen (1988), the severity of obsessive-compulsive symptoms is proportional to and depends only on decreased mood. Moreover, numerous depressive complications of chronic obsessive-compulsive disorder (OCD) have been described. This co-occurrence of both illnesses ranges from 30% to 60% (Akiskal and Pinto, 1999; Cassano *et al.*, 1999; Perugi *et al.*, 1997). Basically, the problem of coexistence of obsessive-compulsive symptoms and bipolar condition is not considered (particularly in type 1 bipolar disorder), even though the results of few studies conducted in both OCD and bipolar patients contradict such an attitude. They indicate that OCD is frequently complicated by bipolar disorder, particularly type 2 (Chen and Dilsaver, 1995; Krüger *et al.*, 1995, 2000; Swartz and Shen, 1999). Authors conducting research on this subject have even distinguished a specific and different subgroup of OCD, so-called “cyclothymic obsessive-compulsive disorder,” in which suicide attempts, irritability, religious obsessions, personality disorders and depressive or hypomanic episodes are encountered more frequently (Hantouche *et al.*, 2002). A highly expressive study, although only indirect in its results, is the one concerning personality disorders in bipolar patients. It has revealed that obsessive-compulsive personality was the most frequent comorbidity (32.4% of patients) in bipolar patients, by contrast with unipolar affective disorder, which was most commonly accompanied by dependent personality (Rossi *et al.*, 2001). Although single studies have confirmed the fact that the co-occurrence of OCD and bipolar disorder is likely, it has not been attempted to elucidate this phenomenon, test the relationships between obsessive-compulsive symptoms and manic state or compare differences in OCD dynamics depending on the phase of bipolar disorder.

AIM OF THE STUDY

The most significant goals were:

1. to test whether or not obsessive-compulsive symptoms coexist with bipolar disorder, and if so, to what degree and what their type and intensity is in individual phases of the illness (mania, depression, remission/euthymia);
2. to compare the frequency of OCD co-occurrence and present its general characteristics depending on the type of bipolar disorder (type 1 and 2);
3. to assess correlations between the intensity of mood disorders (increase and decrease) in bipolar disorder and the severity of OCD;

4. to carry out a retrospective analysis concerning the order in which OCD and bipolar disorder develop, the level to which obsessions and compulsions are bothersome (in patients' self-assessment) as well as the frequency with which they are diagnosed and treated in the course of bipolar condition.

MATERIAL AND METHODS

The subjects were 70 patients previously diagnosed with and treated for bipolar disorder. The patients at the age of 20–60 were treated in the Psychiatry Centre in Katowice, Poland. The number of females and males was nearly equal (36 and 34, respectively). For the purposes of this study, three subgroups were created: subjects in the manic phase of bipolar disorder (BD-M) – 21 patients, subjects in the depressive phase (BD-D) – 25 patients and subjects in remission/euthymia (BD-R) – 24 patients. The mean age in each group ranged from 40.8 to 45.1. The current mental state of all patients was tested by acknowledged diagnostic questionnaires: the Hamilton Depression Rating Scale (HDRS), Young Mania Rating Scale (YMRS) and Yale-Brown Obsessive Compulsive Scale (Y-BOCS) (Hamilton, 1960; Goodman *et al.*, 1989; Young *et al.*, 1978). A factor that distinguished obsession from depressive rumination was the feeling of irrationality and the lack of depressive judgement. Compulsions were understood as compulsive motor actions or mental routines which, if neglected, lead to anxiety (Jaroszyński, 1993). In order to avoid excessively false positive results in OCD co-occurrence, clinically significant results were only the Y-BOCS scores in which bipolar patients presented severe or extreme OCD (score from 24 to 40). The results in the mild and moderate range (from 8 to 23) were considered anankastic symptom presentation, i.e. obsessive-compulsive syndromes (OCS) rather than OCD (Hantouche and Bourgeois, 1995). The results classified in the Y-BOCS scale as subclinical (0–7 score) were considered physiological. Moreover, in order to compare the results, 70 controls were included in the study. The control group was divided into three subgroups that were adequate and comparable (taking into account basic demographic characteristics) with the three tested groups (depressive, manic and in remission).

Group	OCD	OCS	No obsessive-compulsive symptoms	Total
Depression (BD-D)	7	10	8	25
Mania (BD-M)	5	4	12	21
Remission (BD-R)	8	9	7	24
Control-D	0	4	21	25
Control-M	0	3	18	21
Control-R	0	8	16	24
Total	20	40	80	140

Tab. 1. Symptoms of OCD and OCS in the three groups of patients compared with controls

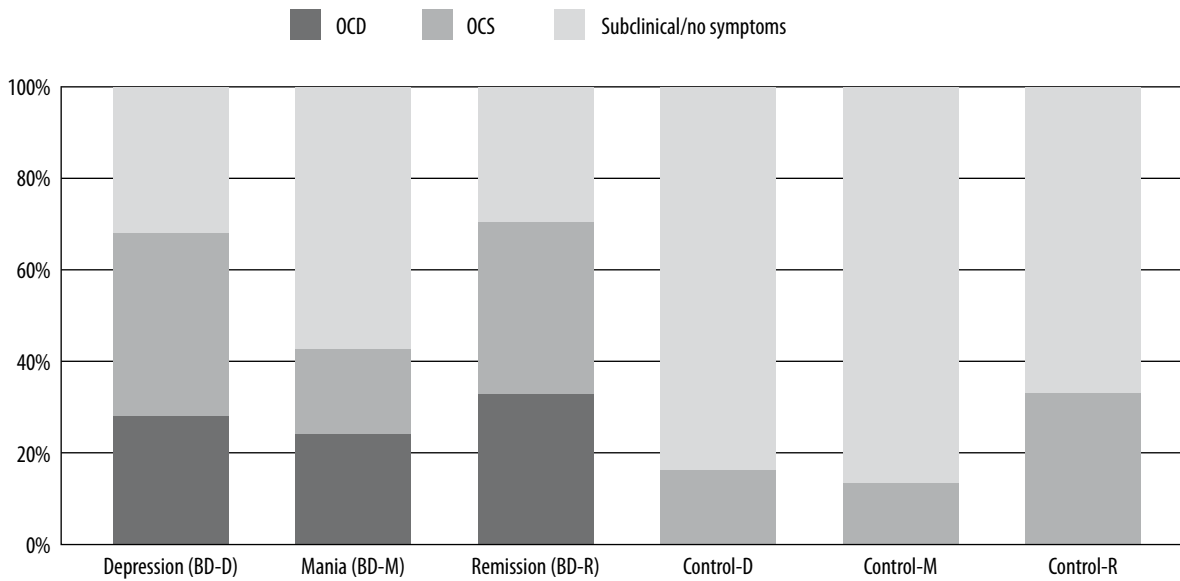


Fig. 1. Graphic representation of the occurrence of OCD and OCS in patients and controls

Controls were recruited from among individuals with no previous diagnoses of mood or anxiety disorders and unrelated to patients.

RESULTS

Coexistence of obsessive-compulsive symptoms with bipolar disorder

Prevalence and level of obsessive-compulsive symptoms

Of 70 bipolar patients, 20 (28.6%) manifested symptoms of OCD (18 severe and 2 extreme). Twenty-three subjects (32.8%) presented anankastic disorders, i.e. OCS (8 – mild,

15 – moderate). Twenty-seven subjects (38.6%) did not exhibit anankastic features (subclinical OCD or no obsessive-compulsive symptoms). The differences in the occurrence of positive OCD diagnoses between controls and patients were significant (Tab. 1, Fig. 1).

Severity and type of obsessive-compulsive symptoms depending of the phase of bipolar disorder

In the BD-D subgroup, severe and moderate symptoms prevailed whereas in BD-M and BD-R most such disorders were at a severe, moderate and mild level. In each subgroup, severe and extreme OCD was statistically significantly more common than in their respective control groups (Tab. 2).

Prevalence and severity of obsessive-compulsive symptoms in BD subgroups		
BD-D (25 patients in the depressive phase)	BD-M (21 patients in the manic phase)	BD-R (24 patients in remission)
7 patients (28%) manifested obsessive-compulsive symptoms at the OCD level: • all 7 subjects presented the severe level	5 patients (23.8%) manifested obsessive-compulsive symptoms at the OCD level: • 4 subjects presented the severe level • 1 subject presented the extreme level	8 patients (33.3%) manifested obsessive-compulsive symptoms at the OCD level: • 7 subjects presented the severe level • 1 subject presented the extreme level
10 patients (40%) manifested obsessive-compulsive symptoms at the OCS level: • 2 subjects presented the mild level • 8 subjects presented the moderate level	4 patients (19%) manifested obsessive-compulsive symptoms at the OCS level: • 2 subjects presented the mild level • 2 subjects presented the moderate level	9 patients (37.5%) manifested obsessive-compulsive symptoms at the OCS level: • 4 subjects presented the mild level • 5 subjects presented the moderate level
8 patients (32%) – no clinically significant obsessive-compulsive symptoms	12 patients (57.1%) – no clinically significant obsessive-compulsive symptoms	7 patients (29.2%) – no clinically significant obsessive-compulsive symptoms

Tab. 2. Prevalence and severity of obsessive-compulsive symptoms depending of the phase of bipolar disorder

BD-D (25 patients in the depressive phase)			BD-M (21 patients in the manic phase)			BD-R (24 patients in remission)		
OCD-O	OCD-C	OCD-M	OCD-O	OCD-C	OCD-M	OCD-O	OCD-C	OCD-M
27.8%	0%	72.2%	0%	66.7%	33.3%	18.2%	4.5%	77.3%

Tab. 3. Type of obsessive-compulsive symptoms depending on the phase of bipolar disorder

OCD level	OCS level	Clinically non-significant
16 patients (36.3%): 15 subjects presented the severe level 1 subject presented the extreme level	10 patients (22.8%): 4 subjects presented the mild level 6 subjects presented the moderate level	18 patients (40.9%): 16 patients manifested no obsessive-compulsive symptoms 2 subjects presented the subclinical level

Tab. 4. Obsessive-compulsive symptoms in patients with type 1 bipolar disorder (44 subjects)

In the analysis of the type of coexisting obsessive-compulsive symptoms, three OCD types were considered: predominantly obsessive OCD (OCD-O), predominantly compulsive OCD (OCD-C) and mixed OCD (OCD-M). Predominantly compulsive OCD in bipolar patients in the manic phase occurred to be statistically significant (66.7%) (Tab. 3).

Obsessive-compulsive symptoms depending on the type of bipolar disorder

Comparison of the prevalence and intensity of OCD in type 1 and 2 bipolar disorder

Of all subjects, 44 were diagnosed with type 1 and 26 with type 2 bipolar disorder. The presentation and intensity of symptoms occurred to be similar in both bipolar disorder types. The differences observed (prevailing OCD in type 1 and OCS in type 2 bipolar disorder) were not statistically significant (Tabs. 4, 5).

Results concerning the type of OCD in given types of bipolar disorder

In the analysis of the type of coexisting obsessive-compulsive symptoms, three OCD types were considered: predominantly obsessive OCD (OCD-O), predominantly compulsive OCD (OCD-C) and mixed OCD (OCD-M). There were no significant differences in OCD types between patients with the two types of bipolar disorder (Tab. 6).

Assessment of the correlations between the intensity of mood disorders in bipolar disorder and the severity of OCD

The severity of obsessive-compulsive symptoms occurred to be correlated with the severity of mood disorders. Anankastic symptoms intensified as mood decreased (depressive group) or increased (manic group). These results are statistically significant and question the common presumption that obsessions and compulsions are secondary to depression. This phenomenon is presented in the Figs. 2 and 3.

OCD level	OCS level	Clinically non-significant
4 patients (15.4%): 3 subjects presented the severe level 1 subject presented the extreme level	13 patients (50%): 4 subjects presented the mild level 9 subjects presented the moderate level	9 patients (34.6%): 5 subjects manifested no obsessive-compulsive symptoms 4 subjects presented the subclinical level

Tab. 5. Obsessive-compulsive symptoms in patients with type 2 bipolar disorder (26 subjects)

Results concerning doctor-patient interview regarding OCD in bipolar patients with respect to the presence of obsessions and compulsions, the chronological order of OCD and bipolar disorder, changes in OCD dynamics as well as co-diagnosis and co-treatment of OCD

Interview regarding OCD

Of all 70 patients, 43 confirmed the presence of obsessive-compulsive symptoms. Not all of these anamnestic symptoms reached the clinical (OCD) or subclinical level (OCS). Their precise interpretation is therefore difficult. Basically, the results confirmed the hypothesis that obsessions and compulsions were not a new or only transient problem for bipolar and OCD/OCS patients. These results are statistically significant.

Interview regarding the chronology of OCD and bipolar disorder

The vast majority of patients (83.7%) claimed (according to their own assessment) that obsessions and compulsions developed primarily and were followed by bipolar disorder. Only 4.7% of subjects claimed that OCD was secondary to bipolar condition. However, 11.6% of patients with both illnesses were unable to provide any answer. Because of this, it is difficult to objectively assess the results of this aspect of the study. However, the considerable majority of positive responses concerning the primary nature of OCD cannot be left unnoticed. The results of this aspect of the study were not different in patients with type 1 and type 2 bipolar disorder and were not correlated with any tested subgroup (depression, mania or remission).

Interview regarding changes in OCD severity in the course of bipolar disorder

95.3% of bipolar patients with OCD confirmed the change in OCD severity depending on the phase of bipolar disorder. 75.6% of subjects stated that obsessions and

Group with type 1 bipolar disorder			Group with type 2 bipolar disorder		
OCD-O	OCD-C	OCD-M	OCD-O	OCD-C	OCD-M
14.3%	14.3%	71.4%	23.8%	14.3%	61.9%

Tab. 6. Type of obsessive-compulsive symptoms depending on the type of bipolar disorder

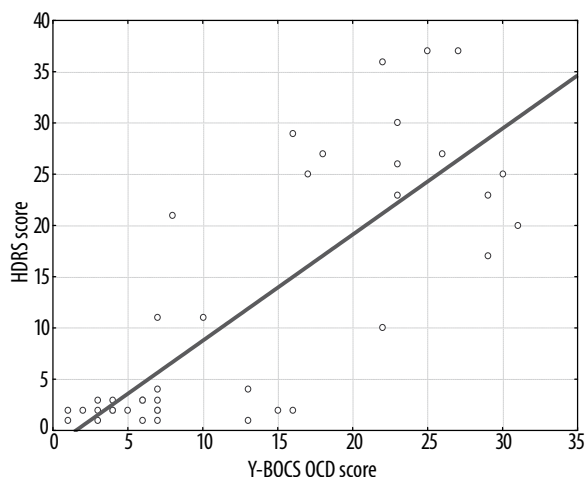


Fig. 2. Correlations between the severity of depressive symptoms and the intensity of obsessive-compulsive symptoms

compulsions intensified during the depression phase, 34.1% claimed that this happened in the manic phase and 9.8% indicated remission. Additional note: some patients selected more than one answer.

Interview regarding co-diagnosis and co-treatment of OCD in the course of bipolar disorder

Of all patients with obsessive-compulsive symptoms (also in their subclinical form), only 6 subjects (13.9%) had it diagnosed as an illness. In 5 cases, these were professional medical diagnoses, and one patient himself critically considered experienced obsessions and compulsions as a pathology. The phenomenon of poor detectability of OCD in the course of bipolar disorder is addressed in the Discussion below.

The results concerning treatment of obsessive-compulsive symptoms in bipolar patients reflect their low detectability. Only 4 patients (9.3%) had ever received OCD treatment; 3 received pharmacotherapy and 1 multi-level treatment. A negligible number of positive responses concerning the manners of OCD and bipolar disorder co-treatment prevents their scientific assessment.

DISCUSSION

The results obtained in this study confirm the fact that obsessive-compulsive symptoms can frequently accompany bipolar disorder. Obsessions and compulsions were observed both in type 1 and type 2 bipolar disorder significantly more frequently than in three control groups. The co-occurrence of obsessive-compulsive symptoms with both types of bipolar disorder was similar, and the differences (both qualitative and quantitative) were not statistically significant. That is why this study has not confirmed the previous reports of Hantouche *et al.* (2002) who demonstrated that the most frequently co-occurring type of bipolar disorder in OCD patients was type 2.

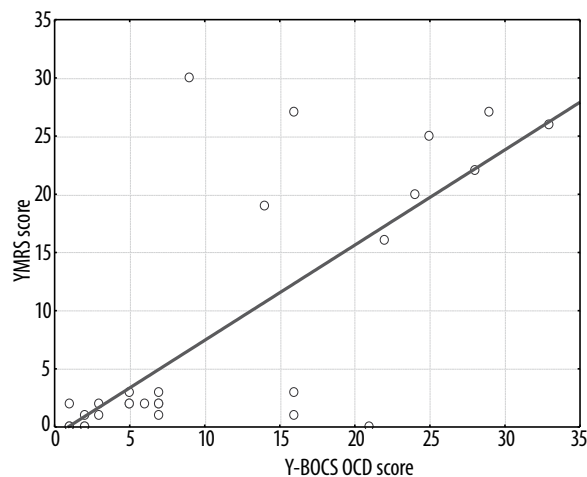


Fig. 3. Correlations between the severity of manic symptoms and the intensity of obsessive-compulsive symptoms

The similarity in the presentation of OCD and OCS in all subgroups is perhaps the most surprising result and prompts further, more detailed interpretation. It could have been anticipated that OCD and OCS would be predominant in the depression phase since, as has already been stated in the Introduction, the correlations between OCD and depression are well-documented and broadly reported to have occurred clinically, both in the past and at present. However, the results of this study lead to conclusions that question the previously quoted opinion of Gordon and Rasmussen (1988), who (as many other contemporary clinicians) believed that OCD is directly proportional to mood decrease. This study indicates that obsessions and compulsions also occur during the manic phase of the illness, which is characterised by increased rather than decreased mood. Of particular note is the fact that, as manic symptoms became more severe, the presentation of obsessions and compulsions (both in patients with OCD and with OCS) intensified, and not decreased as could have been expected. It is therefore assumed that obsessions and compulsions in mania can be a “hidden” diagnostic and therapeutic problem despite the fact that their nature slightly differs from “typical” OCD. First of all, obsessions seem to be of lesser importance here. According to the definition they are not only intrusive, but also carry certain suffering and anxiety during their manifestation or efforts to ignore them. Some patients during the manic episode experienced intrusive, repeatable thoughts (obsessions by definition) without accompanying anxiety (which prevents them to be fully classified as obsessions), but merely as a need to perform repeatable motor actions, i.e. compulsions (which, again, is typical of obsessions). That is how the “rituality” of OCD in the course of bipolar disorder is preserved, but due to heightened pace of thinking, it is more chaotic, incoherent and less precise and repeatable. The rituals become less “rigid,” and patients frequently report no anxiety. On the contrary, they become

bolder and impose their rituals on others. However, when excessive, unnecessary actions (e.g. compulsive washing, cleaning, shopping etc.) are interrupted, patients tend to become irritated, which resembles the reaction of OCD patients, but is more intense thus preventing accurate differentiation of a compulsion. The historical digression made below can help in an attempt to build a probable theory on the pathomechanisms of the correlation between mania and OCD. As early as in the first half of the 20th century, two researchers (Abraham, 1921 and Gero, 1936) noticed a relationship between “manic-depressive psychosis” and “obsessiveness.” These authors also described correlations between bipolar disorder and obsessive-compulsive syndrome, which indicated that a vast majority of bipolar patients present tendencies to obsessive thinking. According to these authors, the presentation of obsessions and obsessive doubts mainly concerned the object of love or desire (which, according to the author of this study, can be accompanied by increased, rather than decreased mood) (Abraham, 1954; Gero, 1936; Namysłowska, 2002).

Nearly all subjects with OCD (irrespective of their classification to subgroups) confirmed the presence of obsessions and compulsions in the past. Considering such numerous positive medical histories and current manifestation of OCD and OCS symptoms, a question arises why in spite of this knowledge the data in medical records did not indicate the presence of past or current anankastic symptoms. This results not only from errors made by attending clinicians. The major observation made while investigating bipolar patients with concomitant obsessions and compulsions was unawareness of patients that these symptoms can be a pathological form of psychomotor activity. Most patients acquired knowledge concerning OCD symptomatology, which they had not possessed before, while filling in the Y-BOCS questionnaire (supplemented with additional questions concerning OCD). Such knowledge enabled them to critically evaluate experienced obsessive-compulsive symptoms. The reaction of bipolar patients with concomitant OCD was similar to the reaction of patients suffering from OCD. It is education of the latter that initiates the implementation of a proper cognitive behavioural therapy which, next to pharmacotherapy, is considered effective treatment of OCD (van Oppen *et al.*, 1995; Żerdziński, 2002, 2003).

Only few patients (9.76%) stated that obsessions and compulsions constituted a particular discomfort during the remission of bipolar disorder despite the fact that, as has been shown in the study, symptoms of OCD and OCS were the most common in this phase. This discrepancy can be elucidated by a hypothesis that OCD accompanying bipolar disorder are egosyntonic, i.e. consistent with one's initial personality. That is why the presentation of anankastic character traits can be normal psychosocial activity for an unaware patient. This theory is consistent with the hypothesis put forward by myself, i.e. that OCD is primary to bipolar disorder. It can also explain the

unwillingness to report OCD symptoms and is reflected in the study mentioned above which revealed that the most common personality disorder in bipolar patients is anankastic personality.

CONCLUSIONS

1. Obsessive-compulsive disorders can coexist with bipolar disorder. This concerns both type 1 and type 2 of the condition, irrespectively of the phases of the illness or euthymia.
2. The severity of obsessive-compulsive symptoms in the course of bipolar disorder varies: from mild (OCS) to extremely severe forms (OCD).
3. The presentation of obsessive-compulsive symptoms in the course of bipolar disorder increases with the severity of both depressive and manic symptoms.
4. Obsessive-compulsive disorders can be primary to bipolar disorder.
5. Obsessive-compulsive disorders coexisting with bipolar disorder are not diagnosed or treated properly.

Conflict of interest

The authors do not report any financial or personal relationships with other persons or organizations that could adversely affect the content of the publication and lay claim to this publication.

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