

## Features of bipolarity among unipolars

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### Summary

**Aim, material and method:** The aim of the study was to assess the occurrence of bipolar disorder in subjects (N=246) receiving treatment due to recurrent depressive disorders. A structured questionnaire based on the diagnostic criteria of major depression and (hypo)mania according to DSM-IV, the criteria of bipolar spectrum disorder by Ghaemi et al. and the Mood Disorder Questionnaire by Hirschfeld, was used. In 19.5% of the subjects, bipolar I disorder was diagnosed, in 35% – bipolar II disorder, and in 12.6% – bipolar spectrum disorder. Such symptoms as excessive sociability, excessive interest in sex, risk and unusual behaviours or irrational money spending were diagnostically the most characteristic of bipolar disorder.

**Results:** Brief episodes of (hypo)mania, including those induced by the use of medicines, as well as the early onset were related to the highest probability of the occurrence of bipolar disorders.

recurrent depressive disorder / spectrum of bipolar disorder / nosology

### INTRODUCTION

The division of affective disorders into uni- and bipolar [1, 2] had undoubtedly introduced a certain order into the diagnostic process; on the other hand, however, from the very beginning it has raised considerable reservations among the clinicians. A dichotomous approach always leads to difficulties in defining the criteria and determining the limits of particular disorders. In the case of mood disorders, the classification of borderline disorders is the most problematic. The controversial aspects include: the criterion of the duration of a hypomanic episode (more or less than

4 days), the occurrence of hypo/manic episodes after the treatment with antidepressants, or the features of personality disorders of a hyperthymic or cyclothymic type. According to Angst [3], hypomanic states lasting 1–3 days, of a recurrent or episodic course (brief recurrent hypomania, brief sporadic hypomania), should also be recognised as bipolar affective disorders.

Goodwin and Ghaemi simply suggested approaching affective disorders as a continuous phenomenon: from dysthymia, recurrent depressive episodes as well as psychotic and atypical episodes, through bipolar spectrum disorder, to bipolar affective disorder type II and type I [4]. The concept of “soft bipolar spectrum”, suggested by Akiskal and Mallya in 1987 [5], includes hyperthymic and cyclothymic features of personality, individuals with the family history of bipolar affective disorder, hypomania induced by pharmacotherapy or another biological treatment. Already in the 1970’s an interesting suggestion was presented, concerning the diagnosis of bipolar disorders in those patients with recurrent depressive disorders who responded posi-

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tively to the treatment with lithium compounds. In the case of such patients, Kupfer et al. [6] used the term "Unipolar-L", while Mendel [7] – "pseudo-unipolar".

Clinical [5] and epidemiologic [3, 8, 9] studies confirm the need to expand the diagnostic criteria of bipolar affective disorders. Akiskal i Mallya in 1987 [5] examined patients who received treatment in an outpatient psychiatric clinic due to affective disorders. The proportions of disorders from the range of bipolar affective disease and unipolar affective disease were similar: bipolar affective disorder type I and type II – 18%, respectively, bipolar affective disorder type III – 9%, cyclothymia – 5%; on the other hand, unipolar affective disorder was 44% and dysthymia – 6%. Epidemiologic data presented by Angst et al. [3], one of the researchers promoting in the past the theory of dichotomy between bipolar affective disorder and unipolar affective disorder, also support the opinion that the range of bipolar affective disorder should be expanded so as to include brief episodes of hypomania as well. The study included adults up to age 35; bipolar affective disorder type I and II was diagnosed in 5.5% of the subjects, while in a further 2.8% affective disorder with a brief episode of hypomania was diagnosed.

Ghaemi et al. [10] suggested the diagnostic criteria of bipolar spectrum disorder, which is neither bipolar affective disease type I nor type II, and which fills the diagnostic space between the spectrum of unipolar depression and bipolar affective disease type II. On the other hand, Hirschfeld et al. [10] developed the Mood Disorder Questionnaire (MDQ), which was to be a screening tool used to measure the occurrence of the disorder of a type of bipolar spectrum disorder.

The authors of this work have tried to assess the occurrence of bipolar affective disorders in patients receiving treatment due to recurrent depressive disorders as well as to analyse the factors which increase the probability of the occurrence of bipolar disorder.

## MATERIAL AND METHOD

The study included 246 subjects, who one by one visited the mental health outpatient clinic in order to receive treatment for recurrent de-

pressive disorders (the F33 group of the ICD–10 classification diagnostic categories). A written consent was obtained from each subject before the study. The age of the subjects ranged from 18 to 65 years (women constituted 75.2%, mean age = 48.13; SD = 9.17). Eliminating criteria included concomitant serious somatic diseases, such as renal or hepatic failure, uncontrolled diabetes or other diseases of the endocrine system, epilepsy and other neurological diseases as well as a past serious head injury with the loss of consciousness.

The study was conducted by psychiatrists who had been instructed beforehand in using research tools. The structured questionnaire included sociodemographical and clinical data obtained from the subjects' medical history and documentation as well as the diagnostic criteria of major depression and (hypo)mania according to DSM-IV. The questionnaire included also the criteria of bipolar spectrum disorder according to Ghaemi [10], such as the occurrence of bipolar disease in a first-degree relative, an episode of (hypo)mania lasting 2 days or more, also after antidepressants, personality disorders of a hyper/cyclothymia or borderline type, recurrent or brief depressive episodes, symptoms of atypical depression (hyperphagia, hypersomnia), psychotic episodes, the onset before the age of 25 years, postnatal depression, a quick loss of the effect of antidepressants or lack of improvement after three or more courses of treatment. Ghaemi's criteria [10] included also questions concerning the occurrence of irritability, distractibility of attention, racing thoughts, agitation (agitated depression). Finally, the subjects filled in the Mood Disorder Questionnaire (MDQ) according to Hirschfeld et al. [11].

In the statistical analysis, apart from descriptive statistics, the following were used: Pearson's Chi-square test for the categorised variables, the Mann-Whitney test in the case of continuous variables, and the analysis of the value of Odds Ratios (OR). Statistical hypotheses verification was defined on the level of significance  $\alpha = 0.05$ . Confidence Intervals (CI) were defined on the level of 95%. The analyses were conducted with the use of SPSS 10.0 program.

## RESULTS

On the basis of the criteria of DSM-IV classification, bipolar affective disorder was recognized in 134 (54.5%) patients receiving treatment due to recurrent depressive disorders (UP). Among them, in 19.5% it was type I disorder (BP-I) which was diagnosed, while in the further 35% bipolar affective disorder type II (BP-II) was recognized. Furthermore, in subjects who did not meet the criteria of bipolar affective disorder type I or II, on the basis of the criteria by Ghaemi and/or the questionnaire by Hirschfeld, in 31 (12.6%) subjects the so-called bipolar spectrum disorder was diagnosed (BP-S).

Among the sociodemographical factors, the only aspect which distinguished the unipolar group from the bipolar one was professional activity; the unipolar group included nearly twice as many professionally active subjects. Other variables did not distinguish the two groups. On the other hand, as far as the clinical factors are considered, the duration of the disorder was significantly longer in the bipolar group. Similarly, both the number of episodes and the number of hospitalisations were considerably greater in the bipolar group, as compared to the unipolar one (table 1).

The highest, multiple risk of the occurrence of bipolar disorder was related to the previous oc-

currence of a brief (hypo)manic episode, including the drug-induced one, as well as to periodical excessive and exaggerated sociability (table 2).

For the occurrence of both BP-I and BP-II the significant aspects were episodes of risk behaviours, unusual or hasty decisions.

A lower, repeated risk of the occurrence of bipolar affective disorder type I or II was related to the features of hyperthymic or cyclothymic premorbid personality as well as atypical symptoms of depression: excessive sleepiness and appetite.

A high risk of the occurrence of bipolar disorder type I was also related to the periods of excessive self-confidence, increased interest in sex or an increase in uncritical money spending. An episode of psychotic depression as well as an early – before age of 25 years – onset of the disorder increased the risk of bipolar disorder type I several times.

On the other hand, such features as: frequently recurring depressive episodes (rapid cycling), episodes of postnatal depression and a quick loss of the effect of antidepressants were not related to a more frequent occurrence of bipolar affective disorders.

The analysis of clinical diagnoses revealed that 2/3<sup>rd</sup>s of the subjects (N=171) suffer from a diagnosed unspecified recurrent depressive disorder

**Table 1.** Sociodemographical and clinical characteristics of the subjects

	Unipolar (N=81)	Bipolar (N=165)	test
Age (mean, standard deviation)	48.02 (9.25)	48.18 (9.16)	Z=-0.359; p=0.721
Women (%)	76.5	74.5	$\chi^2=0.116$ ; df=1; p=0.756
Marital status – married (%)	71.6	73.8	$\chi^2=3.567$ ; df=3; p=0.321
Living alone (%)	14.8	8.7	$\chi^2=2.104$ ; df=1; p=0.186
Education – higher (%)	14.8	14.0	$\chi^2=0.935$ ; df=3; p=0.817
Not active professionally (%)	59.0	74.8	$\chi^2=8.588$ ; df=3; p=0.032
Pensioners (%)	42.5	54.7	$\chi^2=3.161$ ; df=1; p=0.100
Duration of the disorder (mean, standard deviation)	8.16 (6.89)	12.93 (9.70)	Z=-3.871; p=0.000
Number of depression episodes (6 and more)	16.3	43.9	$\chi^2=18.321$ ; df=2; p=0.000
Number of hospitalisations (4 and more)	4.9	20.0	$\chi^2=10.302$ ; df=2; p=0.006
Addictions (%)	17.8	20.7	$\chi^2=0.174$ ; df=1; p=0.826
Somatic diseases (%)	44.4	51.9	$\chi^2=0.852$ ; df=1; p=0.419

**Table 2.** Features which significantly increase the risk of occurrence of the three types of bipolar affective disorders

Features	BP-I N=48		BP-II N=86		BP-S N=31	
	OR	95%CI	OR	95%CI	OR	95%CI
Bipolar affective disorder in a first-degree relative		NS	2.859	1.089 7.506	6.271	2.407 16.339
A brief episode of (hypo)mania (1–3 days), including the drug-induced one	8.404	1.923 36.721	6.113	1.424 26.235	15.800	3.756 66.469
Features of hyperthymic or cyclothymic premorbid personality	4.333	2.384 7.873	2.857	1.553 5.257	NS	
Symptoms of atypical depression (increased appetite, excessive sleepiness)	3.026	1.454 6.298	2.092	1.013 4.319	NS	
Episodes of psychotic depression	2.708	1.211 6.056	NS		2.903	1.232 6.843
Early onset of depression (< age 25)	4.883	2.069 11.522	3.375	1.436 7.931	3.919	1.521 10.098
<i>Excessive irritation (quarrels, fights)</i>	<i>3.038</i>	<i>2.008 4.595</i>	<i>2.096</i>	<i>1.361 3.230</i>	<i>1.437</i>	<i>0.782 2.640</i>
<i>Excessive self-confidence</i>	<i>11.974</i>	<i>5.035 28.473</i>	<i>8.477</i>	<i>3.542 20.287</i>	<i>3.658</i>	<i>1.254 10.669</i>
<i>Decreased need for sleep</i>	<i>4.924</i>	<i>3.013 8.047</i>	<i>2.960</i>	<i>1.761 4.975</i>	NS	
<i>Loquacity</i>	<i>9.286</i>	<i>4.517 19.088</i>	<i>5.980</i>	<i>2.865 12.482</i>	<i>3.318</i>	<i>1.354 8.132</i>
<i>Racing thoughts</i>	<i>3.197</i>	<i>2.088 4.895</i>	<i>2.776</i>	<i>1.819 4.236</i>	NS	
<i>Attention disorders</i>	<i>1.642</i>	<i>1.231 2.190</i>	<i>1.476</i>	<i>1.117 1.952</i>	<i>1.483</i>	<i>1.056 2.083</i>
<i>Increased energy</i>	<i>9.643</i>	<i>4.687 19.796</i>	<i>9.121</i>	<i>4.455 18.675</i>	<i>4.106</i>	<i>1.751 9.630</i>
<i>Hyperactivity</i>	<i>5.954</i>	<i>3.378 10.493</i>	<i>5.523</i>	<i>3.145 9.698</i>	<i>2.375</i>	<i>1.122 5.027</i>
<i>Excessive sociability</i>	<i>20.250</i>	<i>5.006 81.922</i>	<i>12.715</i>	<i>3.123 51.763</i>	<i>11.758</i>	<i>2.689 51.405</i>
<i>Increased interest in sex</i>	<i>17.719</i>	<i>4.344 72.269</i>	<i>9.053</i>	<i>2.178 37.636</i>	<i>6.532</i>	<i>1.336 31.928</i>
<i>Unnecessary, hasty or risk behaviours</i>	<i>24.469</i>	<i>6.109 98.014</i>	<i>10.006</i>	<i>2.423 41.317</i>	NS	
<i>Problems due to excessive money spending</i>	<i>21.094</i>	<i>5.226 85.140</i>	<i>7.624</i>	<i>1.810 32.116</i>	<i>5.226</i>	<i>1.008 27.106</i>

(F33.9). Both groups: that of initially diagnosed specified recurrent depressive disorders (F33.0 – F33.4) and that of initially diagnosed unspecified recurrent depressive disorders (F33.9) did not differ significantly in such aspects as age or the duration of the disorder, the number of depression phases or the number of hypo/manic phases. The hypothesis that bipolar affective disorders occurred more frequently in the group of subjects with an initially diagnosed unspecified recurrent depressive disorder was not confirmed ( $\chi^2=2.623$ ;  $df=3$ ;  $p=0.457$ ). It was discovered that in the case of only 40% of the subjects with initially diagnosed specified disorders within the F33.0 – F33.4 range and 29.8% of the subjects with an initially diagnosed unspecified recurrent depressive disorder (F33.9) the diagnosis of recurrent depressive disorder was confirmed. Type I bipolar affective disorders were recognised in 16% of the subjects from the F33.0 – F33.4 subgroup and in 21.1% of the subjects from the F33.9 subgroup, while bipolar affective disorders type II – in 32% and 36.3% of the subjects, respectively; finally, mood disorders of the bipolar spectrum disorder type were recognised in 12% and 12.9% of the subjects, respectively.

## DISCUSSION

What came as a considerable surprise was the result indicating that over half of the subjects treated with the diagnosis of recurrent depressive disorder meet the criteria of bipolar disorder type I or II. This phenomenon cannot be explained by the greater number of unspecified recurrent depressive disorders, as the greater number of bipolar features in this group of subjects (70.2% to 60%) as compared to the subjects with specified recurrent depressive disorder was statistically insignificant. For comparison, Goldberg et al. [12] in a prospective study including patients with the initial diagnosis of recurrent depressive disorder, reported at least one past episode of mania in 19% of the subjects, while in the further 27% – at least one episode of hypomania.

Apart from a definitely higher percentage of non-working subjects in the group of bipolar affective disorders, no differences were revealed in the sociodemographical parameters between the bipolar group and the unipolar one. Simi-

lar results were achieved by Akiskal et al. [13] in the EPIDEP study. On the other hand, the discovered relationship between the occurrence of bipolarity features and the duration of the disorder as well as the number of past episodes of depression may support the opinion that the occurrence of the conversion from recurrent depressive disorder to disorder of a bipolar nature is highly probable.

The findings of the presented study confirm the role of most of the criteria or clinical features which have already been suggested by researchers [3, 5, 10, 11] in the diagnosis of disorders within the range of bipolar affective disease.

Apart from an episode of (hypo)mania lasting several days, which is an obvious criterion of the bipolar disorder diagnosis, the results suggest that in the case of subjects whose first episode of depression occurred very early, i.e. before age of 25 years, there is a higher probability of affective disorders of a bipolar nature. It has been confirmed by, for example, the studies by Akiskal et al. [14], Abrams and Taylor [15], Geller et al. [16] or Benazzi [17]. Features which increase the probability of an affective disorder of a bipolar nature include also the occurrence of psychotic symptoms [18, 19], atypical symptoms (excessive appetite and sleepiness) [17] or concomitant alcohol addiction [3, 20]. In the presented study addictions were an eliminating criterion but the remaining features increased the probability of an affective disorder of a bipolar nature twice. Psychotic episodes doubled the risk of bipolar affective disorder type I and bipolar spectrum disorder; they did not, however, increase the risk in the case of affective disorder type II, similarly to the study by Benazzi in 2003 [21].

In the presented study, personality features increased the risk of affective disorders type I and II, similarly to the findings of Akiskal i Mallya [5]. The family history of bipolar affective disorders increased the risk of affective disorder type II and bipolar spectrum disorder.

A definitely higher risk of bipolar disorder was indicated by such elements of the subject's medical history as periodical excessive sociability, interest in sex, risk and unusual behaviours, or irrational money spending. It has been confirmed by the studies of other authors, such as Hantouche et al. [22], who even distinguish two groups of features which indicate a hypomanic episode

of either cheerful and socially positive (sunny, classic euphoric) or negative nature (dark, irritable-risk taking).

The findings of this study, similarly to a number of earlier clinical [5, 23, 24, 25, 26] and epidemiologic [3, 8, 9] studies, explicitly suggest the need to verify the diagnostic criteria of affective disorders. The achieved results definitely show that the criteria concerning bipolar affective disorder should be extended. From the clinical point of view, the value of these findings lies in the fact that they draw the attention of doctors-practitioners to the issue of how important it is to take a thorough medical history of the patient as well as to ask questions comprehensible for the patient [17] and illustrated with examples, so that the necessary information can be collected. This, in turn, increases the probability of making a correct diagnosis, and, consequently, of suggesting an effective treatment.

## CONCLUSIONS

1. Past features or behaviours which were diagnostically the most characteristic of all three forms of bipolar affective disorders include: excessive sociability, excessive interest in sex, risk or unusual behaviours or irrational money spending.
2. The occurrence of brief episodes of (hypo)mania, including those drug-induced, as well as the occurrence of the first episode of the disease before the age of 25 years were related to the highest probability of the occurrence of affective disorder of a bipolar nature.
3. The findings of the study indicate the need to improve and deepen the diagnostics of affective disorders, and, moreover, to verify the rules and the duration of the application of antidepressant and normothymic medications in the treatment of affective disorders, which can be of primary importance for the effective therapy for these disorders.

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