

Unipolar Depression versus Bipolar Disorder; an Overview

Gursharan Kashyap 1
Lucy Pauli 2, 3

1 South Essex University Partnership NHS Foundation Trust

2 Clare College Cambridge

3 Clinical School University of Cambridge

Author Participation: GK produced the data and an original draft.
LP edited the data and the draft.

Abstract

The case is made for the importance of diagnosing unipolar depression and bipolar disorder as two separate conditions. Differences in the natural history and course of the disorders, their symptomatology and response to treatment are described. The correct diagnosis and treatment of these conditions is of great importance in determining outcome.

Key Words: mania, bipolar illness, unipolar depression.

Bipolar disorder was previously known as manic-depressive disorder. The term “bipolar affective disorder” was used for the first time in DSM III in 1980. Bipolar disorder is characterised by alternating episodes of mania and depression or mixed episodes (which include both manic and depressive symptoms in the same episode). Mania and depression thus represent the two opposite poles of affective malfunction. Recurrent unipolar depression [F33 in ICD 10], on the other hand, is characterised by episodes of depression followed by a return to the euthymic state; the manic pole of affective malfunction is not represented at all.

It is important to recognise that bipolar disorder and unipolar depression are separate conditions. There are different psycho-biological contributors, including different aetiological factors; there are also different hypotheses with regard to their origin. In addition, there is a difference in their heritability (bipolar 80% and unipolar depression 46%) (1, 2), age of onset, and typical presentation. Overall, bipolar depression causes much more morbidity than unipolar depression, including marked functional impairment and social and economic loss (3). Bipolar disorder tends to be more severe, enduring and complex than unipolar depression; it is different in its nature, course and prognosis (4). The depressive phase of bipolar disorder was previously thought to be similar to unipolar depressive disorder. However, over time, evidence has shown that there are notable differences in the characteristics of the depressive phase of bipolar disorder and unipolar depression (as will be discussed below). It is therefore important to recognise that even the depressive illness of bipolar disorder is a distinct entity, which is now frequently referred to as ‘bipolar depression’.

Moreover, in a study of excess mortality in bipolar and unipolar disorders in Sweden, Osby et al. (4) reported that bipolar disorder raises the suicide risk 20 fold compared with the general population. Goodwin and Jamieson (5) stated that the lifetime bipolar suicide rate is around 19% (5). Suicide usually occurs in the depressive phase of the illness (6).

With so many variables playing significant roles and contributing to the depressive symptoms in these two disorders it is likely that the treatment of acute depression in these two different disorders will also be different, as discussed below.

Unipolar depression is well-recognised. However, it is unusual to diagnose a patient with unipolar mania (7). A patient presenting with mania will usually be diagnosed as having bipolar disorder since it is usually possible to demonstrate previous depressive episodes. Unipolar mania has, however, been

reported. Solomon et al. (8) described 7 patients with a diagnosis of bipolar disorder who had not had an episode of depression in the previous 20 years (8). Yazici et al., who defined unipolar mania as 4 episodes of mania with a depression-free follow-up period of 4 years, found an incidence of 16.3% in their study (7).

One factor that hinders straightforward diagnosis is the fact that patients might be able to cope with hypomanic or mild manic phases or, indeed, might not mind experiencing these periods of elevated mood, but tend to seek expert help in the depressive phases (9). The fact that patients do not present with mild mania and that the depressive episodes usually last longer than the hypomanic ones may lead clinicians to assume that the patient has unipolar depression. In order to ensure a correct diagnosis, specific enquiry needs to be made about mild manic/hypomanic episodes in the assessment of the patient. It is, therefore, important to look for clues that might indicate that a patient has bipolar disorder rather than unipolar depression. There are no investigations that will differentiate bipolar depression from unipolar depression, nor are there any clear-cut clinical features that can distinguish between them in a patient who has had only depressive episodes. However, there are certain features that may assist the clinician in making the correct diagnosis. Depression, especially of mixed type or atypical type, should raise the suspicion of bipolar disorder. An early onset and atypical presentation of depression is linked with Bipolar II disorder (10). Bipolar depressive episodes are more frequently associated with hypersomnia (10), increased appetite (10), diurnal variation of mood and occurrence of psychosis (11). Overall, the duration of bipolar depressive episodes is significantly shorter than unipolar depressive episodes (12). Bipolarity is also suggested by failure of multiple antidepressants in the past, occurrence of frequent episodes of depression and sudden relapse, preceded by an initial quick response to an antidepressant (13). The MDQ (Mood Disorder Questionnaire) has a high specificity of around 90% and a reasonable sensitivity of around 70% in diagnosing bipolar affective disorder (14). Perlis et al. (15) have pointed out that there are additional subtle differences, such as fear in bipolar depression compared to sadness in unipolar depression. Irritability, distractibility, and racing thoughts are commonly seen in bipolar II depression (16).

Akiskal (11) has stated that psychotic features, psychomotor retardation, abrupt onset or offset of depression, reversal of neurovegetative symptoms, tempestuosity, impulsivity, a family history of bipolar disorder or completed suicide, as well as clinical worsening of symptoms, possibly due to treating a mixed affective episode with antidepressants leading to emergence of symptoms, such as increased sexual drive and worsening insomnia, are all important clues to the identification of bipolar depression (11).

The diagnosis of a patient with unipolar depression may also need to be reassessed after the patient receives antidepressant therapy. The description of bipolar disorder III, which is mania precipitated by the administration of antidepressant medication in a person who was previously diagnosed as having unipolar depression (17), illustrates how the diagnosis may need to be changed during the course of the disorder. This change of diagnosis has implications both for treatment and prognosis.

In order to diagnose bipolar disorder correctly it is important to understand the typical course of the condition. Perugi et al., in a systemic retrospective study of 320 patients with bipolar I disorder, found that this usually started with acute depression (18). The acute depressive episode may be followed by another episode of depression or by mania. Acute bipolar depressive episodes can last for variable periods. They are usually shorter but more severe and aggressive compared with unipolar depressive episodes, consequently leading to greater functional and psychosocial impairment. Bowden (19) confirmed that bipolar disorder usually starts with depressive episodes early in life and patients usually spend most of their illness time in the depressive phase. This is especially so in bipolar I disorder (20). However, the course of disorder can be more complicated than this, such as in rapid cycling bipolar. Rapid cycling is the occurrence of at least 4 major mood episodes (depressive, manic, hypomanic, or mixed) during the previous year in a patient with a diagnosis of bipolar I or bipolar II disorder. Rapid cycling was included in the Diagnostic and Statistical Manual of Mental Disorders IV (DSM-IV) in 1994 after a meta-analysis by Bauer and colleagues (21) and is still surrounded by controversy as to whether it represents a temporary or permanent change in course. It carries a higher risk of functional impairment, severe depression and treatment resistance; it is associated with an overall

poorer prognosis compared with non-rapid-cycling bipolar disorder (22). Analysis of the STEP-BD trial suggested rapid cycling might be a temporary phase in the course of bipolar illness and that antidepressant use could worsen the cycling (23).

Altshuler et al. (24), reported that, compared with unipolar depression, the depressive illness of bipolar disorder does not resolve fully and there are often subclinical and subsyndromal symptoms of depression (24) present that do not respond to antidepressants, signifying that there is a relative resistance to antidepressants in bipolar disorder. Furthermore, when in partial remission, patients can continue to have ongoing chronic subclinical symptomatology of depression, which is enough to cause functional impairment, increasing the risk of relapse to a full-blown depression (25).

Unfortunately, many patients still receive an incorrect diagnosis. Hirschfeld et al. (26), reporting the results of the national depressive and manic-depressive association survey, stated that 69% of patients with bipolar disorder are misdiagnosed primarily as major depressive disorder and for more than one third of patients there was a delay of around 10 years before they were eventually diagnosed as having bipolar disorder. The patients in this category, who were misdiagnosed as having depression and were treated with ineffective antidepressants, tended to follow an unfavourable course (30). This is important to note because the use of antidepressants in bipolar disorder has been discredited (27). Until recently it was assumed that the treatment for the acute depressive episode of both unipolar and bipolar depression was antidepressant medication. The evidence showing that antidepressant medication can change the course, nature, severity and prognosis of bipolar affective disorder has been presented in a separate paper in this volume (see paper entitled "The Place of Antidepressant Medication in the Treatment of Bipolar Affective Disorder"). In summary, the judicious use of antidepressant medication during the depressive phase only, and always in combination with mood stabilisers, is recommended by the NICE Guidelines, although several studies have now recommended mood stabilisers as the mainstay of treatment of bipolar depression. Certain mood stabilisers such as quetiapine and lamotrigine have been shown to be specifically effective in bipolar depression. Muzina et al. (27) have suggested that giving antidepressants to a patient with bipolar disorder can be detrimental since bipolar type II patients usually respond favourably to lithium if they have not previously been exposed to antidepressants. In addition, discontinuation of antidepressants can enhance lithium response (28).

It is important that the distinction between unipolar and bipolar depression be made appropriately since, if we consider a broader definition of bipolar disorder, the research suggests that up to 50% of recurrent major depression (especially the subgroups with atypical presentation, early onset and non-response to antidepressant medication), might actually fall into the bipolar group (30). This has important implications for the treatment and prognosis of the patient.

GP Comment

What have I learned from this paper?

This paper explains that unipolar and bipolar depression are distinct conditions. The authors detail aspects of the history that help to identify bipolar depression, including alternating episodes of mania and depression, atypical depression (e.g. hypersomnia, increased appetite, psychosis), a strong family history, early age of onset, profound morbidity and functional impairment. It is important that this distinction between unipolar and bipolar depression is made as it has important implications for treatment and prognosis.

Dr Jenny Hopwood, GP Trainee.

References.

1. McGuffin P, Rijsdijk F, Andrew M, Sham P, Katz R, Cardno, A. The heritability of bipolar affective disorder and the genetic relationship to unipolar depression. *Arch Gen Psychiatry* 2003;60:497-502
2. Kendler KS, Neale MC, Kessler RC, et al. The lifetime history of major depression in women. Reliability of diagnosis and heritability. *Arch Gen Psychiatry* 1993;50 (11):863–87017
3. Judd LL, Akiskal HS, Schettler PJ, Endicott J, Leon AC, Solomon DA, Coryell W, Maser JD, Keller MB. Psychosocial Disability in the Course of Bipolar I and II Disorders: A Prospective, Comparative, Longitudinal Study. *Archives of General Psychiatry* 2005;62 (12):1322–1330
4. Osby, U Brandt, L Correia, N Ekbom, A Sparén, P. (2001). Excess mortality in bipolar and unipolar disorder in Sweden. *Archives of General Psychiatry* 2001;58 (9): 844–850.
5. Goodwin FK, Jamison KR (1990). *Manic-Depressive Illness*. Oxford University press. 2nd Edition. New York. NY; 2006.
6. Valtonen HM, Suominen K, Haukka J et al. Differences in incidence of suicide attempts during phases of bipolar I and II disorders. *Bipolar Disorders* 2008;vol. 10, no. 5:pp. 588–596,
7. Yazici O, Kora K, Uçok A, Saylan M, Ozdemir O, Kiziltan E, Ozpulat TJ. Unipolar mania: a distinct disorder? *Affect Disord*. 2002 Sep;71 (1-3):97-103.
8. Solomon DA, Leon AC, Coryell W, Mueller TI, Posternak MA. Unipolar mania: A 20-year follow-up study. *American Journal of Psychiatry* 2003;160:2049–2050.
9. Hirschfeld RM. Psychiatric management. In: American Psychiatric Association, ed. *Guidelines Watch: Practice Guideline for the Treatment of Patients With Bipolar Disorder*. 2006. <http://www.psychiatryonline.com/content.aspx?alD=148440>. Accessed on 09/12/12).
10. Benazzi F. Is there a link between atypical and early-onset unipolar depression and bipolar II disorder? *Compr Psychiatry* 2003 Mar-Apr;44 (2):102-9.
11. Akiskal HS. Searching for behavioral indicators of bipolar II in patients with major depressive episodes: the “red sign”, the “rule of three” and other biographic signs of temperamental extravagance, activation and hypomania. *J Affect Disord*. 2005;84:279–290
12. Forty L et al. Clinical differences between bipolar and unipolar depression. *The British Journal of Psychiatry* 2008;192:388-389
13. Roy PH. Misdiagnosis of bipolar disorder. *Am J Manag Care* 2005;11:S271–S274.
14. Hirschfeld RM, Holzer C, Calabrese JR, et al. Validity of the mood disorder questionnaire: A general population study. *Am J Psychiatry* 2003;160:178–80.
15. Perlis RH, Eileen Brown MD, Baker RW, Nierenberg AA. Clinical Features of Bipolar Depression Versus Major Depressive Disorder in Large Multicenter Trials. *Am J Psychiatry* 2006;163:225-231
16. Benazzi F. Depressive mixed states: unipolar and bipolar II. *Eur Arch Psychiatry* 2000;ClinNeurosci. 250:249-253.
17. Akiskal HS et al. The evolving bipolar spectrum. Prototypes I, II, III, and IV. *Psychiatr Clin North Am*. 1999
18. Perugi G, Micheli C, Akiskal HS, et al. Polarity of first episode, clinical characteristics, and course of manic depressive illness: A systemic retrospective investigation of 320 bipolar I patients. 2000;41:13–18.
19. Bowden CL. Strategies to reduce misdiagnosis of bipolar depression. *Psychiatric services (Washington, D.C.)* 2001;52 (1): 51–55.
20. Judd LL, Akiskal HS, Schettler PJ et al. The long-term natural history of the weekly symptomatic status of bipolar I disorder. *Archives of General Psychiatry* 2002;vol. 59, no. 6:pp. 530–537.
21. Bauer MS, Calabrese JR, Dunner DL, et al. Multisite data reanalysis of the validity of rapid cycling as a course modifier for bipolar disorder in DSM-IV. *Am J Psychiatry* 1994;151:506-515
22. Lee S, Tsang A, Kessler RC, Jin R, Sampson N, Andrade L, Karam EG, Mora ME, Merikangas K, Nakane Y, Popovici DG, Posada-Villa J, Sagar R, Wells JE, Zarkov Z, Petukhova M: Rapid-cycling bipolar disorder: cross-national community study. *Br J Psychiatry* 2010 Mar;196 (3):217-25
23. Schneck CD, Miklowit DJ, Miyahara S, Araga M, Wisniewski S, Gyulai L, Allen MH, Thase ME, Sachs GS. The Prospective Course of Rapid-Cycling Bipolar Disorder: Findings From the STEP-BD. *The American Journal of Psychiatry*;VOL. 165, No. 3
24. Altshuler LL, Gitlin MJ, Mintz J, Leight KL, Frye MA. Subsyndromal depression is associated with functional impairment in patients with bipolar disorder. *Journal of Clinical Psychiatry* 2002;vol. 63, no. 9:pp. 807–811,

25. Perlis RH, OstacherMJ, Patel JK et al. Predictors of recurrence in bipolar disorder: primary outcomes from the systematic treatment enhancement program for bipolar disorder (STEP-BD). *American Journal of Psychiatry* 2006;vol. 163, no. 2:pp. 217–224.
26. Hirschfeld RM, Lewis L, Vornik LA. Perceptions and impact of bipolar disorder: how far have we really come? Results of the national depressive and manic-depressive association 2000 survey of individuals with bipolar disorder. *J Clin Psychiatry* 2003 Feb;64 (2):161-74).
27. Muzina DJ, Elhaj O, Gajwani P, Gao K, Shelton MD, Calabrese JR. Advances in treatment of rapid cycling bipolar disorders. Oldham JM, Riba MB, Ketter TA, eds. *Review of Psychiatry, Volume 24*. Arlington, Va: American Psychiatric Publishing Inc; 2005:147-178
28. Wehr TA, Sack DA, Rosenthal NE et al. Rapid cycling affective disorder: contributing factors and treatment responses in 51 patients. *Am J Psychiatry* 1988;145:179-184.
29. Angst J. The bipolar spectrum. *Br J Psychiatry* 2007;190:189–9.
30. Bipolar II disorder: epidemiology, diagnosis and management. *CNS Drugs*. 2007;21 (9):727-40.