

# **Soft Bipolar Depression Progress in China**

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# Abstract

Object: To introduce soft bipolar progress in China. Methods: We introduced soft bipolar concept into Chinese psychiatry and some studies about soft bipolar had been carried out by Chinese psychiatrist according to our soft bipolar criteria. Results: These studies include as following: 1) the proportion of bipolar disorder with depressive episode for the first time; 2) unipolar depression and bipolar depression compared in psychopathology; 3) the difference in personality and temperament between unipolar and bipolar; 4) family history of bipolar disorder; 5) antidepressants and soft bipolar. All these were used for establishing Chinese advising diagnostic criteria of soft bipolar disorder. It indicated that concept of soft bipolar was not only receipted, but also studied. Conclusion: Some progress of soft bipolar in China has been done.

### **Keywords**

Soft Bipolar, Psychopathology, Family History, Personality, Diagnostic Criteria

# **1. Introduction**

The "soft bipolar" concept for the first time in China, appeared in "Foreign Medical Journal of Psychiatry" in 2002 (Jin, 2002). It is not a disorder term, but it only refers to soft bipolar depression rather than bipolar disorder. In this review, we described the concept of soft bipolar, background, and clinical significance, course of treatment, age of onset, personality characteristics, switching to mania induced by antidepressant usage and psychopathology in detail. We also put out our recommendation of the soft bipolar diagnostic criteria.

In China, the implementation of the concept of soft bipolar at the time also encountered some resistance. The important reason is that the soft-phase is not a disease entity concept, so there is no need to establish diagnostic criteria of soft bipolar. However, we found that the soft-bipolar though not as a disease entity existed, but the phenomena of soft bipolarity did exist in clinical practice. In clinical practice the various phenomena about soft bipolarity tell us attention to soft bipolarity and it is important to establish diagnostic criteria of soft bipolar, for which we have carried out relevant studies.

Our research has three aspects. The first was investigation and study, in which we compared differences in psychopathology between unipolar depression and bipolar depression. The second was evidence-based medicine study. And the third is the expert consultation. We also establish the proposed diagnostic criteria of soft bipolar disorder.

## 2. The Proportion of Bipolar Disorder with Depressive Episode for the First Time

The percentage of bipolar disorder in all mood disorder can accounts for diagnosis of bipolar disorder in absolute number and relative amounts. Our domestic survey found that of bipolar depression in all depressive disorders was 21.6%, about 1/5. And ratio of unipolar depression and, bipolar depression was 2.5:1 (Xu & Jin, 2003; Jin et al., 2007). Abroad, reported in the literature, the majority of bipolar disorder, about 2/3 tend to depressive episode for the first time form, which easily lead to misdiagnosis, that is the misdiagnosis of bipolar depression and unipolar depression. This is actually a very difficult problem, which bipolar disorder without manic episodes or manic symptoms is always not diagnosed, and a lot of diagnostic criteria of bipolar disorder, such as the DMS-IV, ICD-10, CCMD-3 is such a criteria with request, so it is actually on the time that we need to be taken into account before the appearance of manic symptoms. We apply the method of retrospective survey and found that for the first time of depression onset group were 63.8%, but mania for the first time onset were 36.2% (Xu & Jin, 2003).

## 3. Comparison in Psychopathology between Unipolar Depression and Bipolar Depression

We compared mainly nuipolar depression with bipolar depression with the onset of the first form of depression. by both clinical studies and review literature. This was the application of evidence-based medicine and, the results showed that differences in phenomenology between unipolar depression and bipolar depression, which are that bipolar patients tend to relatively early age of onset, obviouspsychomotor inhibition, more iiritable, more mixed episodes, and more atypical depression, suicidal behavior or attempt compared to unipolar disorder (Jin et al., 2004; Jin, Tang, & Wang, 2006). At same time, we also found significant differences in the somatic problem, age, the first onset age, time of onset, relapse rate, illness duration and outcome between bipolar depression and unipolar depression (Zhang et al., 2008). So these results suggested that nuipolar and bipolar depression had some differences in psychopathology, and will help differentiated a depression maybe nuipolar or possible bipolar.

## 4. Personality and Temperament

Ferrier (2001) reported hyperthymia, dysthmia and cyclothmia have been decribed as long-term components of personality, or persistent temperamental dysregulations, which may later give rise to episode of mood disorder. Cyclothymia is characterized by switches between two poles of mood and behavior: one phenomenologically similar to bipolar depression, atypical depression and dysthymia, with hypersomnia, hyperphagia, lethargy and tearfulness; and the other characterised by decreased sleep, increased energy and jocularity. Hyperthymia resembles the "upper" of these poles, perhaps with occasional spells of dysthymia, while dysthymia resembles the "lower" pole and may be accompanied by a major dedpressive episode, or hypomania following a major depressive episode (Ferrier, Mac, & Young, 2001). The personality characteristics of bipolar disorder usually manifested emotionally unstable and volatile. Our research found that single-unipolar depression or recurrent depression present less extroverted personality characteristics compared with bipolar depression (Jin et al., 2004; Xing et al., 2005). By Evidence-based medicine approach, we also find that results of total of 851 cases of bipolar disorder patients and 779 cases of normal control group bye meta-Analysis, which is. 403 cases with bipolar disorder have more significantly the number of outgoing personality characteristics than that of 212 normal cases (138/244, 89/244, Z = 11.45, P < 0.001, ES = 0.69); And also find that patients with bipolar depression were significantly more than the number of extreme personality than that of unipolar depression (101/208, 46/172, Z =5.22, *P* < 0.05, ES = 0.42) (Xing et al., 2005).

### 5. Family History of Bipolar Disorder

Jones (2001) considered that evidence of clinical, outcome, and genetic studies supports the hypothesis that the majority of puerperal psychotic episodes are manifestations of an affective disorder diathesis with a puerperal

trigger. Family studies of puerperal psychosis consistently demonstrate familial aggregation of psychiatric (particularly affective) disorder and suggest a major overlap in the familial factors predisposing to puerperal psychosis and bipolar disorder. The single large study that used direct interview of relatives suggested that familial factors play a role in vulnerability to puerperal triggering itself (Ian, 2001). Akiskal (1996) also posted that other patients with depression, when first observed clinically, appear "unipolar" but are actually prebipolar in that their hypomania is first evident upon pharmacologic challenge; many of these patients have a family history of bipolar disorder (Akiskal, 1996). Smith (2005) found that a positive family history of bipolar disorder patients after the occurrence of depression, bipolar disorder is a high possibility (Smith, Harrison, Muir, & Blackwood, 2005). Our research found that bipolar patients had higher positive bipolar disorder family history rate and higher significant positive family history of high suicide. Compared to unipoar depressive disorder (Xu & Jin, 2003; Zhang et al., 2008) by EBM, we also found that bipolar disorder had higher family history compared unipolar disorder, and the difference in family history between bipolar and unipolar disorder was significant, and ES = 0.24, which suggest differences in mild to moderate, At same time, the ratio positive family history was higher level than unipolar close to 11% (Xing et al., 2005). So family history maybe a important factor related to soft bipolar.

#### 6. Antidepressants and Soft Bipolar

In general, we do not use antidepressant to bipolar depression. This rationale is based on support for the following four propositions that was found by Ferrier: 1) The risk of antidepressant induced mood-cycling is high, 2) Antidepressants have not been shown to definitively prevent completed suicides and reduce mortality, whereas lithium has, 3) Antidepressants have not been shown to be more effective than mood stabilizers in acute bipolar depression and have been shown to be less effective than mood stabilizers in preventing depressive relapse in bipolar disorder and 4) Mood stabilizers, especially lithium and lamotrigine, have been shown to be effective in acute and prophylactic treatment of bipolar depressive episodes (Ferrier, Mac, & Young, 2001). But a patient with depression, that we don't know it's unipolar or bipolar. We also often apply antidepressants for patients. In fact, treatment-induced hypomania was 100% specific for eventual endpoint of bipolar disorder, closely followed by a family history of bipolar disorder, which was 98% specific (Ian, 2001). Consequently, we give great weight to this factor as protective of a bipolar disorder.

Our investigation about treatment-induced hypomania had some conclusion as following.

1) Retrospective survey: we received 675 cases of patients with depression by antidepressant treatment and survey rate of manic, hypomanic, rapid cycling. The results showed that, a total of 97 patients during treatment switch to other phase in 675 cases of patients, the total incidence rate of 14.4%. 36 cases switch to other phase in 396 cases of patients taking the single SSRI for depression, switching rate was 9.1%; 24 cases switch to other phase in 105 cases of patients taking single venlafaxine for depression, switching rate was 22.8%, 6 cases switch to other phase in 41 cases taking single NaSSA depressed patients, switch ingrate was 14.6%, 18 switch to other phase in 66 patients taking single TCA, switch ingrate was 27.2%. 9 switch to other phase in 25 cases taking any two antidepressants of, switching rate was 36%, 4 cases switch to other phase in 43 cases taking combination of a antidepressant and a mood stabilizers, switching rate was 9.3% (Jin et al., 2005).

2) By prospective study, we survey switching rate of 190 patients with depressive disorder who received 3 months of antidepressant treatment. The results showed that a) switching rate: 18 cases of phase switched in 190 patients for 3 months of treatment, switching rate was 9.47%. b) transfer with time: the shortest phase conversion occurred 3 days, the longest 81 days, the average was  $(28.4 \pm 24.5)$  days. That of male patients was  $(30.8 \pm 19.5)$  days, female patients was  $(26.9 \pm 13.1)$  days, not statistically significant (t = 1.48, P > 0.05). But the unipolar depression were  $(45.9 \pm 8.1)$  days was longer than that of bipolar depression  $(20.4 \pm 10.6)$  days. c) transfer time of patients have a family history  $(23.5 \pm 12.8)$  days was shouter with no family history  $(33.7 \pm 20.1)$  days. d) phase conversion factors for comparison: 4 in 61 male patient cases, 14 in 129 female patients cases switched, the difference was not significant ( $X^2 = 0.89$ , P > 0.05); No 170 unipolar depression switched and 8 cases in 20 bipolar depression patients appeared to switching, the difference was significant ( $X^2 = 24.29$ , P < 0.01); the 5 cases switched in 36 cases with application of mood stabilizers, and 13 cases switched in 154 cases without mood stabilizers, phase, the difference was not significant ( $X^2 = 1.07$ , P > 0.05). The 7 cases switched in 38 patients with family history of mood disorder, 11 cases switched in 152 cases with no family history of mood disorders, the

difference was significant ( $X^2 = 4.43$ , P < 0.05) (Jin et al., 2007).

For patients switched, especial diagnosed depression should be thought as bipolar disorder. But all recent diagnostic criteria don't receive mania or hypomania induced by antidepressants, so these patients had to treat as soft bipolar (Carta et al., 2012).

### 7. Expert Consult (Jin, Ma, Chen, Tong, Chen, & Tang, 2006; Jin et al., 2004)

How a patient with depression with which traits can be diagnosed as soft bipolar and what is these trait? We carry out expert consult. This consults consist of two parts. One is about our psychiatrist's understanding in bipolar disorder and soft bipolar. Other is about our psychiatrist's understanding in switching with antidepressants. In first consult, specialists choose some item according to their own experience to select factors closely relative to bipolar disorder and soft bipolar. The recovery rate of 70% of the letter, 56 doctors answered all the questions. Expert believe family history, personality, some of the symptoms and early age of onset, female were closely related to bipolar disorder and soft bipolar. In second consult, expert believe that risks with switching were usage of antidepressant drugs, combined with several antidepressant medications, not accompanied by application of mood stabilizers and history of depression switching during the treatment.

### 8. Chinese Advising Diagnostic Criteria of Soft Bipolar Disorder (Jin et al., 2007)

By all studies about, we establish Chinese advising diagnostic criteria of soft bipolar disorder as following:

- 1) at least one major depressive episode.
- 2) no spontaneous hypomania or manic episode.
- 3) antidepressant-induced hypomania or manic episode (Kuiper, Curran & Malhi, 2012).
- 4) if no criterion C, at least 2 items of the following:
- a) bipolar family history of first rank relatives.
- b) cycling personality or extreme extravert.
- c) hyperthymic personality.

5) if only one of criterion D, at least 4 items as following. if no anyone of criteria on D, at least 6 items as following:

- a) early age of onset of major depressive episode.
- b) brief major depressive episode.
- c) borderline personality.
- d) atypical depression.
- e) psychomotor suppression.
- f) psychotic depression.
- g) depression related with menses.
- h) extreme biological rhythm.
- i) suicide or family history of suicide or depression.
- j) one or more substance absue.

How about this criteria? We carry out test. 410 patients with depressive episode diagnosed with Chinese advising diagnostic criteria of soft bipolar disorder, to compare to the criteria of bipolar disorder of CCMD-3 and DSM-IV for evaluation of diagnostic index following 12 months. Results show that compare to CCMD-3, sensitivity was 76.5%, specificity was 83.9%, accuracy was 80.7%, fale positive rate was 23.5%, false negative rate was 16.1%. positive predictive value was 78.7%, negative predictive value was 82.2%. and compare to DSM-4, sensitivity was 78%, specificity was 84.2%, accuracy was 81.5%, fale positive rate was 22%, false negative rate was 15.8%. Positive predictive value was 79.8%, negative predictive value was 82.8%. We think this criteria was ideal.

#### 9. Summary

"Soft bipolar" is a stage before bipolar disorder that was really diagnosed. It mainly presents depression that confuses our clinical diagnosis between bipolar depression and unipolar depression. So we often treat these patients with antidepressants. This is incorrect. In fact these were many differences between soft bipolar and unipolar depression. These factors conclude age of onset, clinical symptoms, personality, family history and so on.

We put out soft bipolar concept to avoid many dis-diagnosis of depression. Many clinical facts suggest that our idea is not only practical but also significant in theory about bipolar disorder.

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#### **Conflict of Interests**

All authors declare that they have no conflicts of interest.

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