UNIT NO. 2

OVERVIEW OF BIPOLAR DISORDER

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ABSTRACT

Bipolar disorder is a serious psychiatric illness that has a negative impact on multiple domains of functioning. The diagnosis is frequently difficult due to the varied symptoms of the disorder and the management often challenging. This article discusses the clinical features of the two main subtypes of the disorder and the risks associated with it. The management of risk and poor treatment adherence is explored. This will guide clinicians working with patients to achieve better clinical outcomes.

Keywords: Bipolar disorder; mania; hypomania; depression; risk; adherence; treatment

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INTRODUCTION

Bipolar disorder is a cyclical mood disorder characterised by distinct periods of mood disturbances. Sustained elevation or depression of mood is observed and psychotic symptoms may be present. The prevalence of bipolar disorder in Singapore is as yet unknown, but it is generally accepted that it affects 1-2% of people in their lifetime.^{1,2} The onset of bipolar disorder is usually between 15-25 years old and the risk of relapse could be as high as 87%.3 The impact on patients is significant and usually adverse. Bipolar disorder has been shown to negatively affect social and occupational functioning, lower the quality of life of patients and increase health care utilisation and costs.4 It was estimated that the illness cost the United States \$15.5 billion in lost productivity annually in the early 1990s.5 There is an increased risk of suicidality, with a quarter of patients attempting suicide at least once.⁶ Co-morbidity with other psychiatric disorders is common, especially anxiety and substance use disorders.7

CLINICAL FEATURES

In Singapore, the DSM-IV-TR is commonly used for both diagnostic and research purposes. Under the DSM-IV-TR classification, manic episodes (Table 1) are present in bipolar I disorder and hypomanic episodes (Table 2) are present in bipolar II disorder. Unlike manic episodes, hypomanic episodes are shorter in duration, not severe enough to cause marked impairment or necessitate hospitalisation, and psychosis is

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absent. Major depressive episodes (Table 3) are present in both, although in some cases, patients may only have had manic episodes; such patients are still classified as having bipolar I disorder. When both the criteria for a manic episode and major depressive episode are met for nearly every day during at least a 1-week period, a mixed episode is diagnosed. Rapid cycling patients have four or more episodes of a mood disturbance in the previous 12 months that meet criteria for major depressive, manic, mixed or hypomanic episode.

Table I. Manic Episode

- A. A distinct period of abnormally and persistently elevated, expansive, or irritable mood, lasting at least 1 week (or any duration if hospitalisation is necessary).
- B. During the period of mood disturbance, three (or more) of the following symptoms have persisted (four if the mood is only irritable) and have been present to a significant degree:
 - (I) inflated self-esteem or grandiosity
 - (2) decreased need for sleep (e.g., feels rested after only 3 hours of sleep)
 - (3) more talkative than usual or pressure to keep talking
 - (4) flight of ideas or subjective experience that thoughts are racing
 - (5) distractibility (i.e., attention too easily drawn to unimportant or irrelevant external stimuli)
 - (6) increase in goal-directed activity (either socially, at work or school, or sexually) or psychomotor agitation
 - (7) excessive involvement in pleasurable activities that have a high potential for painful consequences (e.g., engaging in unrestrained buying sprees, sexual indiscretions, or foolish business investments)
- C. The symptoms do not meet criteria for a Mixed Episode.
- D. The mood disturbance is sufficiently severe to cause marked impairment in occupational functioning or in usual social activities or relationships with others, or to necessitate hospitalisation to prevent harm to self or others, or there are psychotic features.
- E. The symptoms are not due to the direct physiological effects of a substance (e.g., a drug of abuse, a medication, or other treatment) or a general medical condition (e.g., hyperthyroidism).

American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders. 4th Edition. Text revision. Washington DC: APA, 2000

Table 2. Hypomanic episode

- A. A distinct period of persistently elevated, expansive, or irritable mood, lasting throughout at least 4 days, that is clearly different from the usual non depressed mood.
- B. During the period of mood disturbance, three (or more) of the following symptoms have persisted (four if the mood is only irritable) and have been present to a significant degree:
 - (I) inflated self-esteem or grandiosity
 - (2) decreased need for sleep (e.g., feels rested after only 3 hours of sleep)
 - (3) more talkative than usual or pressure to keep talking
 - (4) flight of ideas or subjective experience that thoughts are racing
 - (5) distractibility (i.e., attention too easily drawn to unimportant or irrelevant external stimuli)
 - (6) increase in goal-directed activity (either socially, at work or school, or sexually) or psychomotor agitation
 - (7) excessive involvement in pleasurable activities that have a high potential for painful consequences (e.g., the person engages in unrestrained buying sprees, sexual indiscretions, or foolish business investments)

- C. The episode is associated with an unequivocal change in functioning that is uncharacteristic of the person when not symptomatic.
- The disturbance in mood and the change in functioning are observable by others
- E. The episode is not severe enough to cause marked impairment in social or occupational functioning, or to necessitate hospitalisation, and there are no psychotic features.
- F. The symptoms are not due to the direct physiological effects of a substance (e.g., a drug of abuse, a medication, or other treatment) or a general medical condition (e.g., hyperthyroidism).

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Table 3. Major depressive episode

- A. Five (or more) of the following symptoms have been present during the same 2-week period and represent a change from previous functioning; at least one of the symptoms is either (I) depressed mood or (2) loss of interest or pleasure:
 - depressed mood most of the day, nearly every day, as indicated by either subjective report (e.g., feels sad or empty) or observation made by others (e.g., appears tearful). Note: In children and adolescents, can be irritable mood.
 - (2) markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day (as indicated by either subjective account or observation made by others)
 - (3) significant weight loss when not dieting or weight gain (e.g., a change of more than 5% of body weight in a month), or decrease or increase in appetite nearly every day. Note: In children, consider failure to make expected weight gains.
 - (4) Insomnia or hypersomnia nearly every day
 - (5) psychomotor agitation or retardation nearly every day (observable by others, not merely subjective feelings of restlessness or being slowed down)
 - (6) fatigue or loss of energy nearly every day
 - (7) feelings of worthlessness or excessive or inappropriate guilt (which may be delusional) nearly every day (not merely self-reproach or guilt about being sick)
 - (8) diminished ability to think or concentrate, or indecisiveness, nearly every day (either by subjective account or as observed by others)
 - (9) recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide
- B. The symptoms do not meet criteria for a Mixed Episode.
- C. The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- D. The symptoms are not due to the direct physiological effects of a substance (e.g., a drug of abuse, a medication) or a general medical condition (e.g., hypothyroidism).
- E. The symptoms are not better accounted for by Bereavement, i.e., after the loss of a loved one, the symptoms persist for longer than 2 months or are characterised by marked functional impairment, morbid preoccupation with worthlessness, suicidal ideation, psychotic symptoms, or psychomotor retardation.

American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders. 4th Edition. Text revision. Washington DC: APA, 2000

Patients are in a euphoric mood during manic episodes, although irritability and agitation can be present. They may become disinhibited in their speech and behaviour – talking loudly, making inappropriate comments and becoming overfamiliar with strangers. Their fast-paced speech is a reflection of their racing thoughts. They experience a surge in energy levels and do not feel fatigued, even with less sleep. Patients often have grandiose ideas and beliefs about their abilities, initiating

ambitious projects that are not finished because of distractibility and disorganisation. Insight is lost and judgement impaired, which leads to risk taking behaviours like speeding, spending money excessively, substance misuse and sexual indiscretions. If psychotic symptoms are present, they are usually hallucinations and/or delusions congruent to the euphoria and grandiosity that the patient is experiencing. As a result, patients' social and working life are adversely affected. In hypomanic episodes, the symptoms and signs are attenuated and insight is often retained. Patients frequently prefer to be in this state, as they feel creative, energetic and productive. Friends and family also notice and welcome this change as patients appear more outgoing and sociable. However, hypomanic patients are still at risk of making disadvantageous decisions, as judgment continues to be impaired.

In both bipolar I and II disorders^{9,10}, patients experience depressive symptoms for as much as 50% of the time. The symptoms and signs of bipolar depression are essentially the same as that in unipolar depression. However certain features of depression have been reported to occur more frequently in patients suffering from bipolar disorder (Table 4)^{11,12}. These features are not pathognomonic of bipolar depression but they may serve as clues to identifying bipolar disorder, especially if depression, rather than mania, is the presenting symptom. A higher frequency of past suicide attempts in bipolar depressed patients (26.6% in bipolar vs. 17.8% in unipolar patients) has been observed.¹³ Suicide usually occurs when patients are in the depressive phase of the illness.¹⁴ It is essential to conduct a risk assessment for depressed bipolar patients and treat the depression adequately.

Table 4.	
Clinical features more common in bipolar I depression	Clinical features more common in unipolar depression
Symptoms and signs Hypersomnia and/or increased daytime napping	Initial insomnia or reduced sleep
Hyperphagia and/or weight gain "Leaden paralysis" (sensation of heavy limbs)	Decreased appetite and/or weight loss
Psychomotor retardation (physical and mental slowing)	Normal or increased activity levels (agitation, restlessness)
Psychotic features and/or pathological guilt Lability of mood, manic symptoms	Somatic complaints
Course of illness	
Early onset of first episode of depression (<25 years old suggested)	Later onset of first episode of depression (>25 years old suggested)
Multiple prior episodes of depression (5 or more episodes suggested)	Long duration of current episode of depression (more than 6 months suggested)
Family history Positive family history of bipolar disorder	Negative family history of bipolar disorder

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DIAGNOSTIC CHALLENGES

In a local study, 15 75% of patients first presented with depression and bipolar disorder was the initial diagnosis in only 34% of the cases. Bipolar disorder is commonly misdiagnosed as unipolar depression, as patients usually present to medical professionals when depressed, before the development of manic or hypomanic symptoms. Patients are more likely to seek help when depressed as depressive episodes are generally more distressing than hypomania. Patients who have experienced hypomania or mania may not be aware it is abnormal, often attributing it to normal mood swings. The history of risk-taking behaviours by patients in their manic state may not have been volunteered, especially if it is not asked by medical professionals. 16 As a result, the diagnosis of bipolar disorder may be delayed by as long as two years. 15 A recent multi-centre study¹⁷ reported that a family history of mania, at least 2 prior mood episodes, first psychiatric symptoms before the age of 30 years old, mania/hypomania during antidepressant therapy, and current mixed state suggest the presence of bipolarity in patients presenting with depression.

Bipolar disorder has also been misdiagnosed as other psychiatric disorders, due to the heterogeneity of the signs and symptoms of both poles of the illness. Agitation, irritability and mood disturbances may be erroneously attributed to borderline personality disorder. Anxiety disorders, which are often comorbid with bipolar disorder,⁷ may mask the symptoms of bipolar disorder. Bipolar patients have high rates of co-morbid substance misuse,⁷ as patients try to seek relief by self-medicating. Diagnosis becomes difficult as the mood disturbances, disorganised behavior, and even psychotic experiences are assumed to be the result of intoxication or withdrawal states.

Younger patients presenting with the symptoms suggestive of bipolar disorder need to be assessed for attention deficit hyperactivity disorder. Organic causes need to be considered for patients presenting for the first time above the age of 40 years old. Endocrinological disorders (e.g. hyperthyroidism, Cushing's disease), neurological disorders (e.g. neoplasm, multiple sclerosis), and autoimmune disorders (e.g. systemic lupus erythematosus) have to be excluded.

Diagnostic scales have been developed and used in research settings; however there is little evidence to suggest that they are useful in screening or diagnosing bipolar disorder in the general public or primary care setting. In addition, there is the risk of "over-diagnosing" bipolar disorder. ¹⁸ Careful clinical assessments, including obtaining the history of past episodes of mania and hypomania in patients with first presentation of depression, remain the key accurate diagnosis.

RISKS ASSOCIATED WITH BIPOLAR DISORDER

Patients who are manic tend to spend indiscriminately, exposing themselves to possible financial ruin. Indulging in pleasure-seeking activities like promiscuous sex and psychoactive substances is detrimental to health and reputation. Irritability, agitation and aggression may lead to damage of social and

occupational relationships, and potentially run-ins with the law. Depressed patients are at risk of self-harm and misuse of substances. Self-neglect (poor diet and personal hygiene, non-adherence to treatment) frequently occurs in patients experiencing either pole of the illness. Psychotic symptoms may put patients at risk for suicide (e.g. a depressed patient who hears voices instructing him to kill himself as he is "of no use to this world") or dangerous situations (e.g. a grandiose patient who believes he is as skilful as a racing driver and speeds while driving).

RISK MANAGEMENT

In addition to interviewing patients, obtaining corroborative history from friends and relatives is helpful in establishing risk. In the assessment of suicide risk, non-modifiable risk factors like recent divorce or bereavement, history of impulsive behaviour, previous self-harm, and family history of suicide identifies the high-risk patient. The patient should be asked about suicidal thoughts and plans. Modifiable risk factors, such as anxiety and agitation, psychosis, feelings of hopelessness, social isolation, unemployment, co-morbid medical or psychiatric illnesses, can be alleviated by utilising medical, psychological and social interventions. Protective factor should be emphasised e.g. religious or moral objections to suicide, good coping and functioning in the past.

A risk-management plan developed in collaboration by the treating doctor with family members or friend is helpful. In the event of a relapse, a risk-management plan will guide decision-making in terms of psychiatric treatment, including hospital admissions; financial arrangements to prevent overspending; and other concerns e.g. the amount of access by colleagues and friends when the patient is unwell. Patients can learn to recognise the early signs and symptoms of a relapse -- the "relapse signature". It is usually unique to each patient and often subtle e.g. (for mania/hypomania) feeling more alert, completing tasks quicker than before; (for depression) easily tearful for no reason, becoming indecisive. The riskmanagement plan is activated if required and steps can be taken to prevent progression to a full-blown relapse. Involuntary admission under the Mental Health (Care and Treatment) Act¹⁹ should be considered when patients are at immediate risk to themselves or others and are not cooperative with treatment due to the loss of insight.

MANAGEMENT CHALLENGES

Pharmacological treatment is the cornerstone in preventing relapses but poor adherence is common.²⁰ Frequent manic relapses may lead to decreased response to medication²¹ and are predictive of poorer outcomes.²² Patients who are adherent to mood stabilisers, like lithium,²³ are less likely to self harm and die by suicide. In a review,²⁴ risk factors associated with poor adherence had been broadly categorised into three groups: (1)

demographic and illness related factors; (2) knowledge, attitudes and beliefs; (3) treatment variables (Table 5). These are useful in identifying and guiding the management of at-risk patients. The development of a good therapeutic alliance with patients is crucial to reducing denial or self-stigmatisation and improving adherence. Addressing patients' concerns through education about the illness, treatment benefits and side effects goes a long way to consolidating the collaborative effort and clarifying doubts. This may be carried out using written material or repeated explanations during clinical sessions. Including family members in such discussions addresses their concerns and provides the sense of working towards a common goal. Constant professional exchanges between the family physician and the psychiatrist ensure continuity of care for the affected patient.

Table 5: Factors associated with non-adherence to treatment

Demographic and illness related factors

Younger age
Not married
Acute manic or depressive state
Psychosis
Substance abuse
Personality disorder
Cognitive deficits

Knowledge, attitudes and beliefs to illness and treatment

Feeling stigmatised
Denial of illness
Lack of knowledge about illness and medication
Lack of trust in medication and clinician
Unrealistic treatment expectations
Fear of side effects
Negative influence from family
Preference for "sick' role

Preferring the "high"

Fear of being "dependent" on medication

Treatment variables

Poor therapeutic alliance Previous non-adherence Lack of continuity of care Lack of adjunctive psychosocial interventions

Adapted from Berk L, Hallam KT, Colom F et al.24

CONCLUSIONS

Bipolar disorder is a serious mental illness with significant negative impact on multiple domains of an individual's life. Its diagnosis and treatment presents many clinical challenges. The optimal management of bipolar disorder requires both pharmacological and psychosocial treatments to be delivered in a collaborative manner to achieve the best possible outcome.

REFERENCES

- I. Angst J. The emerging epidemiology of hypomania and bipolar II disorder. J Affect Disord. 1998; 50(2-3): 143-51.
- 2. Grant BF, Stinson FS, Hasin DS, et al. Prevalence, correlates, and comorbidity of bipolar I disorder and axis I and II disorders: Results from the National Epidemiologic Survey on Alcohol and Related Conditions. J Clin Psychiatry, 2005; 66:1205-15.

- 3. Keller MB, Lavori PW, Coryell W, et al. Bipolar I: A five year prospective follow-up. J Nerv Ment Dis, 1993; 181: 238-45
- 4. Dean BB, Gerner D, Gerner RH. A systematic review evaluating health-related quality of life, work impairment, and health-care costs and utilisation in bipolar disorder. Curr Med Res Opin, 2004; 20(2): 139-54.
- 5. Kessler RC, Akiskal HS, Ames M, et al. Prevalence and effects of mood disorders on work performance in a nationally representative sample of U.S. workers. Am J Psychiatry. 2006;163(9):1561-8.
- 6. Simon GE, Hunkeler E, Fireman B, et al. Risk of suicide attempt and suicide death in patients treated for bipolar disorder. Bipolar Disord, 2007; 9: 526-30.
- 7. Merikangas KR, Akiskal HS, Angst J, et al. Lifetime and 12-Month Prevalenceof Bipolar Spectrum Disorder in the National Comorbidity Survey Replication. Arch Gen Psychiatry. 2007;64:543-52.
- 8. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders. 4th Edition. Text revision. Washington DC: APA, 2000.
- 9. Judd LL, Akiskal HS, Schettler PJ, et al. The Long-term Natural History of the Weekly Symptomatic Status of Bipolar I Disorder. Arch Gen Psychiatry. 2002; 59: 530-7.
- 10. Judd LL, Akiskal HS, Schettler PJ, et al. A Prospective Investigation of the Natural History of the Long-term Weekly Symptomatic Status of Bipolar II Disorder. Arch Gen Psychiatry. 2003;60:261-9.
- 11. Mitchell PB, Goodwin GM, Johnson GF. Diagnostic guidelines for bipolar depression: a probabilistic approach. Bipolar Disord 2008; 10: 144-52.
- 12. Mitchell PB, Loo CK, Gould BM. Diagnosis and monitoring of bipolar disorder in general practice. Med J Aust, 2010; 193: \$10-13.
- 13. Bottlender R, Jäger M, Strauß A, et al. Suicidality in bipolar compared to unipolar depressed inpatients. Eur Arch Psychiatry Clin Neurosci, 2000;250: 257–61.
- 14. Isometsa ET, Henriksson MM, Aro HM, et al. Suicide in bipolar disorder in Finland. Am J Psychiatry 1994; 151:1020-4.
- 15. Peh ALH, Tay LK. Demographical profile and clinical features of patients with bipolar disorder in an outpatient setting in Singapore. Singapore Med, 2008; 49(5): 380-3.
- 16. Hirschfield RMA, 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; 64: 161-74.
- 17. Angst J,Azorin J-M, Bowden CL. Prevalence and Characteristics of Undiagnosed Bipolar Disorders in Patients With a Major Depressive Episode: The BRIDGE Study. Arch Gen Psychiatry. 2011; 68(8): 791-9.
- 18. Phelps JR, Ghaemi SN. Improving the diagnosis of bipolar disorder: Predictive value of screening tests. J. Affect. Disord, 2006; 92: 141-8.
- 19. Mental Health (Care And Treatment) Act 2008, Republic of Singapore.
- 20. Perlick DA, Rosenheck RA, Kaczynski R, et al. Medication non-adherence in bipolar disorder: a patient-centered review of research findings. Clin Approach Bipolar Disord, 2004; 3: 56-64.
- 21. Swann AC, Bowden CL, Calabrese JR et al. Differential effect of number of previous episodes of affective disorders on response to lithium or divalproex in acute mania. Am J Psychiatry, 1999; 156: 1264-6.
- 22. Tohen M, Waternaux CM, Tsuang MT. Outcome in mania: A 4-year prospective follow-up 0f 75 patients utilising survival analysis. Arch gen Psych, 1990; 47: 1106-11.
- 23. Cipriani A, Pretty H, Hawton K, et al. Lithium in the Prevention of Suicidal Behavior and All-Cause Mortality in Patients With Mood Disorders: A Systematic Review of Randomised Trials. Am J Psychiatry, 2005; 162:1805-19.
- 24. Berk L, Hallam KT, Colom F et al. Enhancing medication adherence in patients with bipolar disorder. Hum. Psychopharmacol Clin Exp, 2010; 25: 1-16.

LEARNING POINTS

- Bipolar disorder is a cyclical mood disorder characterised by distinct periods of mood disturbances, namely manic episodes are present in bipolar I disorder and hypomanic episodes are present in bipolar II disorder.
- In both bipolar I and II disorders patients experience depressive symptoms for as much as 50% of the time and suicide usually occurs when patients are in the depressive phase of the illness.
- In a local study, 75% of patients first presented with depression and bipolar disorder was the initial diagnosis in only 34% of the cases.
- Pharmacological treatment is the cornerstone in preventing relapses but poor adherence is common.
- The development of a good therapeutic alliance with patients is crucial to reducing denial or selfstigmatisation and improving adherence.