Bipolar Disorder — Classification and Therapy

Bipolar disorder is a psychiatric illness characterized by periods of depression and mania/hypomania. It affects approximately 1% of the general population. The disease results from genetic mutations precipitated by environmental factors. Clinically, it varies from manic features of hyperactivity and irritability, to depressive episodes with reduced activity, lethargy and loss of interest, and a mixed picture of manic and depressive episode features. Treatment of bipolar disease involves pharmacotherapy with mood stabilizers, behavioral therapy, and electroconvulsive therapy. Mortality and morbidity are mainly due to the associated suicidal and homicidal tendencies.

Definition

Bipolar disorder is a psychiatric illness that is characterized by fluctuating periods of low mood (depression) and periods of elevated mood (mania/hypomania). Therefore, it is also known as manic-depressive illness (MDI) or bipolar affective disorder.

These episodes occur several times a year or rarely one episode or none in a year. These may consist of:

- A depressive episode where the patient has low mood and feels lethargic,
hopeless, with appetite and sleep changes.

- A manic episode where the patient is very active, has abnormal excessive energy, and an elevated mood.
- A hypomanic episode is like a manic episode but it is usually less severe and rarely affects the social functioning of the patient.

Types of bipolar disorders

**Bipolar I**

Defined by at least one manic episode and often accompanied by depressed or hypomanic periods.

**Bipolar II**

Marked by at least one hypomanic episode, at least one major depressive episode, and the absence of manic episodes.

**Mixed episodes**

When depressed, mood co-exists with manic symptoms. Patients meet criteria for both, depressive and manic episodes simultaneously.

**Rapid cycling**

Alternating periods of hypomania and periods with mild to moderate depressive symptoms over the course of two years.

Epidemiology

Bipolar disorder has an average worldwide prevalence of 1—3 %. The disease manifests clinically in early adulthood with the mean age of 21 years and it is rare beyond 40 years of age.

Bipolar disorder has no racial or sexual predisposition, although there seems to be a female preponderance for bipolar II or hypomania.

Classification

The bipolar affective disorder can be classified into:

1. **Bipolar I disorder**: mainly characterized by the presence of at least one manic episode with or without a depressive episode involvement. The episodes may tip over to frank psychosis.
2. **Bipolar II disorder**: is characterized by at least one hypomanic episode, no manic episodes, and one major depressive disorder.
3. **Cyclothymic disorder**: is characterized by chronic episodes of hypomania and depression for at least two years. These episodes do not meet the criteria for major depression or mania.

It should be noted that bipolar II disorder is not a milder form of bipolar I disorder, rather both diseases are different entities. Nevertheless, patients with bipolar I disorder have severe and dangerous episodes that are likely to cause a change in behavior and onset of psychosis, while patients with bipolar II disorder remain depressed for longer posting a challenge in recovery.
Etiology and Pathophysiology

Bipolar disorder is thought to arise from environmental influences in individuals who are genetically predisposed to develop the disease due to genetic mutations. These people have structural and biochemical abnormalities that are easily tipped over into bipolar disorder by an array of environmental triggers. The influencing factors can be grouped into:

Genetic predisposition

Persons with a first-degree relative having a bipolar disorder have a seven-fold increase in developing the disease. They also have an increased chance of developing other mood disorders, especially the depressive disorders.

Biochemical and biological influence

Patients with genetic risks thought to have certain structural and biochemical abnormalities leading to the development of the disorder, for instance, a decrease in the amount and availability of certain neurotransmitters within the brain.

Environmental influence

The environmental factors exacerbate the genetic and biological defects in these patients. These factors include childhood abuse, exposure to long-term stress and pregnancy.

Pharmacological factors

Antidepressant use may precipitate bipolar and manic episodes in high-risk patients.

Clinical Features of Bipolar Disorder

Bipolar disorder presents with features that characterize the manic episode, hypomanic episode, depressive episode, or a mixed picture. The disease may also present with other additional features such as:

- Anxiety
- Psychosis
- Prior psychiatric treatment and use of antipsychotic medications
- Comorbid medical conditions

Maniac episode features

The patient has at least three features of disturbed mood with elation, irritability, and expansiveness for at least one week.

1. Having a feeling of self-importance
2. Reduced need for sleep
3. Reduced need for food
4. Grandiosity
5. Excessive talking or quick talking
6. Easily distracted
7. Racing thoughts
8. Excessive pleasurable activities with painful consequences (e.g. excessive sexual activities, increased libido)
9. Lack of substance abuse or general medical condition to explain the patient’s state

Symptoms of Mania
- Distractibility
- Insomnia
- Grandiosity
- Flight of ideas
- Activity/agitation
- Speech (pressured)
- Thoughtlessness

Hypomanic episode features
They are like features of a manic episode but do not cause any noticeable symptoms at social places such as work and school.

The episode is referred as hypomanic if the symptoms are seen for at least 4 days, but not long and severe enough to be labeled maniac type.

Depressive episode features
This episode is indicated by the presence of five or more symptoms during the same 2-week period, which includes:

1. Depressed mood
2. Significant weight loss or weight gain
3. Psychomotor retardation and agitation
4. Feeling of despair, worthlessness, and guilt
5. Preoccupation with death and suicidal ideation
6. Lack of appetite
7. Loss of interest in activities
8. Hypersomnia/insomnia
9. Loss of energy/fatigue
10. Reduced concentration
11. Pessimistic tendencies

Symptoms of major depression
- Sleep
- Interest
- Guilt
- Energy
- Concentration
Appetite
Psychomotor activity
Suicidal ideation

Investigations

Although bipolar disorder is a clinical diagnosis, the relevant workup is performed to rule out organic disorders that may mimic this condition. They include:

- A complete blood count
- Renal function tests
- Liver function tests
- Thyroid function tests

Sometimes, other tests may be needed depending upon the patient’s history and risk factors, such as:

- Cerebrospinal fluid analysis
- Venereal disease research laboratory tests (VDRL)
- HIV testing
- Drug screen (to rule out alcohol and substance abuse)
- Dexamethasone suppression test and ACTH stress test

Neuroimaging, e.g. MRI scan or CT scan of the head, may be needed if there is a focal neurological deficit or the patient is having atypical symptoms or the condition has occurred in very young or older individuals.

Differential Diagnosis of Bipolar Disorder

<table>
<thead>
<tr>
<th>Disorder</th>
<th>Description</th>
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<tr>
<td>Dysthymic disorder</td>
<td>A unipolar mood disorder with chronic low mood. It does not meet the criteria for major depressive or bipolar disorder.</td>
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<tr>
<td>Schizophrenia</td>
<td>Psychotic disease that has negative symptoms that may mimic depression.</td>
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<tr>
<td>Bereavement</td>
<td>Patients will have a similar presentation of mood alteration. Bereavement lacks functional impairment and rarely lasts beyond 2 months.</td>
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<tr>
<td>Mood disorders secondary to substance</td>
<td>Change of mood may occur in the presence of an identifiable trigger such as abuse of alcohol.</td>
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<tr>
<td>Hyperthyroidism and thyrotoxicosis</td>
<td>Mania and increased irritability, restlessness may occur in hyperfunctioning of the thyroid gland.</td>
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Mood disorders.

Medical causes of mania
- Neurological disorders (temporal lobe seizures, multiple sclerosis, viral encephalitis and cerebral tumors)
- Metabolic (hypothyroidism, Cushing’s syndrome)
- Neoplasms
- HIV infection
- Systemic disorders (B12-deficiency, carcinoid syndrome, uremia)

Medication/substance-induced mania
- Corticosteroids
- Sympathomimetics
- Bronchodilators
- Levodopa
- Antidepressants
- Dopamine
- Agonists

Treatment of Bipolar Disorder

Treatment of bipolar disorder should begin with the identification of the condition and preventing harm to self and others.

The further treatment is based on the presenting symptoms and severity of the episode. The modalities of treatment include the following:

Pharmacotherapy

It is indicated for moderate to severe disease that requires hospital admission in the acute phase of treatment. Several classes of drugs exist and selection is based on:

- Identification of response to a drug during treatment of a close relative may render a certain drug suitable.
- Clinical judgment of the anticipated response based on symptomatology and experience of the clinician.
- Tolerance in patients with comorbidities such as cardiac diseases or renal disease.

The drugs are mainly administered for mood stabilization and control of psychotic episodes. The groups of drugs to select from include:

1. **Mood stabilizers and antipsychotics:** Mood stabilizers such as lithium and sodium valproate are used in combination with antidepressants in patients who present with anxiety. They are also important in the reduction of recurrence rates.
2. **Tricyclic antidepressants (TCAs)** such as amitriptyline and clomipramine: They are effective in the management of the depressive episode of the disorder. They have a good response rate but are associated with dangerous adverse effects such
as sedation and anticholinergic effect.

3. **Selective serotonin reuptake inhibitors (SSRIs)** such as sertraline and citalopram: They are administered in a once a day dosing and have a safer side effect profile thus are a desirable group of drugs. Common side effects include gastrointestinal upset, sexual dysfunction, and insomnia. The antidepressants, TCAs and SSRIs, may also precipitate the manic episode in a patient having depressive phase.

4. **Antianxiety medications**: Benzodiazepines, such as lorazepam or clonazepam, have also been used in the treatment of anxiety seen in these patients.

**Psychotherapy**

It is the treatment of choice for mild disease and mainly undertaken in the outpatient setting. The forms of psychotherapy include:

- a. Psychological counseling/psychoeducation.
- c. Interpersonal and social rhythm therapy (IPSRT).
- d. Family-focused therapy.

**Combination therapy**

A combination of psychotherapy and pharmacotherapy is often considered in the successful management of bipolar disorder.

**Electroconvulsive therapy (ECT)**

ECT is considered in a situation where there is refractory disease despite treatment and in severe symptoms. It is a safe and effective method of treatment.

**Complications of Bipolar Disorder**

1. Suicidal attempts and acts.
2. Violence and homicidal tendencies.
3. Social isolation and dysfunction.
4. Unemployment.

**Course and Prognosis of Bipolar Disorder**

Morbidity and mortality are mainly associated with suicidal and homicidal tendencies. 25 – 50% of the patient’s attempt suicide and about 11% are successful. The patients also exhibit higher mortality rates compared to the general population.

The disease can be prevented/controlled by early initiation of medication, early psychological counseling to avoid stresses in early life and lifestyle changes such as dietary modification and increase in exercise activity to reduce the impact of stress.

**References**
