

The ups and downs of *bipolar*

Get to know this common mood disorder and how to care for patients who have it.

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Editor's note: Last issue we took a look at obsessive-compulsive disorder. Join us this issue as we delve into bipolar disorder.

Bipolar disorder affects 2.6% of all adults, regardless of gender or race. The average age of onset is 25, but symptoms may emerge earlier. In any practice setting, you may be assigned to care for a patient with bipolar disorder. This recurrent mood disorder causes extreme emotional swings—ranging from euphoria to severe, incapacitating depression—with symptoms that can present a challenge to nursing care.

In this article, I'll explore the common symptoms of bipolar disorder and how to provide the best care for your patient.

Mania and depression roller coaster

The American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-V)*, defines bipolar disorder as a recurrent mood disorder that includes periods of mania or mixed episodes of mania and depression. People experiencing bipolar disorder may describe

their lives as a roller coaster ride that's scary and unpredictable.

There are two classifications of bipolar disorder. Bipolar I disorder involves recurrent episodes of mania and depression. A reduced level of mania, called *hypomania*, characterizes bipolar II disorder. The symptoms for hypomania are the same as for mania, but they're less severe.

When the patient is in a *manic phase*, symptoms of euphoria and elation are common. Other symptoms of mania include overconfidence, hyperverbosity, hyperactivity, irritability, poor judgment, hypersexuality, physical aggression, and diminished sleep and appetite.

When the patient is in a *depressive phase*, feelings of worthlessness, helplessness, and hopelessness; difficulty concentrating; loss of interest in people or activities that usually bring pleasure; fatigue; sleep problems; somatic complaints; and suicidal thoughts prevail.

The length of the phases varies, lasting days or weeks. Certain people with bipolar disorder are described as rapid cycling, defined by the *DSM-V* as four or more mood swings in a single 12-month period. Patients

disorder

who experience rapid cycling are harder to treat, with women and children more likely to be rapid cyclers.

An inherited imbalance

The cause of bipolar disorder is multifactorial. Evidence suggests a strong hereditary component. A person with a parent or sibling who has been diagnosed with bipolar disorder is four to six times more likely to develop the illness. Scientists are researching commonalities in the genetic patterns of people diagnosed with bipolar disorder. The Bipolar Disorder Phenome Database was developed to link visible symptoms of the disorder with common genetic changes. This database may result in finding the gene, or combination of genes, that causes the symptoms of bipolar disorder and help direct future treatment modalities.

The mood instability of bipolar disorder is linked to chemical changes. An imbalance of the neurotransmitters that allow smooth transmission of impulses from one neuron to another is associated with the symptoms of bipolar disorder. Inadequate release or faulty storage mechanisms may cause the imbalance. However, the chemical origins of psychiatric disorders are becoming more complex. New neurotransmitters, such as glutamate and glycine, are being studied because of their influence on neuronal cell



growth and decreasing manic symptoms. Inflammation can also play a role in the disorder by increasing cytokine levels and decreasing resistance to cortisol. This inflammation may result in the depressive symptoms of bipolar disorder.

Brain imaging studies are further assisting scientists to observe what happens in the brain of a person with bipolar disorder. Functional magnetic resonance imaging and positron emission tomography allow researchers to study the brain at work. In fact, one study found similar patterns of brain activity in people reporting an unstable mood. Examining changes in the structure and function of the brain can assist with identification of neural circuit biomarkers that may aid in the diagnosis and treatment of bipolar disorder.

Difficult diagnosis

The diagnosis of bipolar disorder is based on the patient's symptoms, course of the

illness, and family history when available. Several standardized rating scales can assist with accurate diagnosis and help you identify patients that may need further evaluation and treatment for bipolar disorder. The Mood Disorder Questionnaire is a self-reporting tool that covers the major symptoms of depression. The Clinical Global Impression Scale identifies symptoms of bipolar disorder and the affect they have on activities of daily life. The

Young Mania Rating Scale addresses the symptoms of bipolar disorder that an adolescent may experience.

In children, diagnosis can be difficult because other conditions, such as attention deficit hyperactivity disorder or anxiety disorder, share similar symptoms. In adolescents, hormonal changes can trigger mood swings that may mimic bipolar disorder.

Twenty percent of older patients diagnosed with bipolar disorder experience their first episode after age 50. It may be that minor symptoms occurring before the diagnosis are overlooked in older adults. They may seek treatment when depressed, but the manic symptoms of elevated mood and increased energy may go unreported. In addition, medical problems such as endocrine or electrolyte disturbances, neurologic problems, and adverse reactions to medications can mimic symptoms of bipolar disorder.

Treatments in combination

Medication therapy is critical for treating bipolar disorder. First-line treatment includes lithium, antiepileptic drugs, and antipsychotics (see *Medications used to treat bipolar disorder*).

Lithium is a simple alkali metal, similar to sodium, which has been used for 50 years to treat bipolar disorder. Although it's effective in managing mood, it has a narrow therapeutic range and can cause various adverse reactions. The effective and safe use of lithium depends on a balance of the patient's plasma lithium level. Frequent monitoring is needed, particularly at the beginning of treatment and with dosage changes. If lithium plasma levels exceed therapeutic dosage ranges, gastrointestinal symptoms and fatigue can occur. With increasing levels or toxicity, the patient can experience cardiac arrhythmias, seizures, and even coma.

Lithium is excreted through the kidneys, so effective regulation depends on the patient's kidney function and electrolyte concentration. Hyponatremia can cause



Symptoms of bipolar disorder

Manic phase

- Feelings of euphoria and elation
- Overconfidence
- Hyperverboisity
- Hyperactivity
- Hypersexuality
- Irritability
- Poor judgment
- Physical aggression
- Diminished sleep and appetite

Depressive phase

- Feelings of worthlessness, helplessness, and hopelessness
- Difficulty concentrating
- Loss of interest in people or activities that usually bring pleasure
- Fatigue
- Sleep problems
- Somatic complaints
- Suicidal thoughts

cheat
sheet

Medications used to treat bipolar disorder

Drug	Adverse reactions	Nursing considerations
Lithium	<ul style="list-style-type: none"> • Common: hand tremors, polyuria, polydipsia, nausea, fatigue, metallic taste, weight gain • Mild-to-moderate toxicity (blood level 1.5 to 2 mEq/L): ECG changes, diarrhea, vomiting, lack of coordination, slurred speech, blurred vision • Severe toxic effects (blood level greater than 2.5 mEq/L): leukocytosis, seizures, coma, and heart block 	<ul style="list-style-type: none"> • Monitor blood urea nitrogen, creatinine, and electrolyte levels; divide doses and make sure the patient takes with meals • Monitor ECG and notify the prescriber to order a lithium level; the dosage may be decreased or doses held • Support the patient's airway, breathing, and circulation and initiate seizure precautions
Antiepileptics	<ul style="list-style-type: none"> • Blood dyscrasia (agranulocytosis) • Thrombocytopenia • Drowsiness and dizziness 	<ul style="list-style-type: none"> • Monitor the white blood cell count and medication level • Assess for signs of infection; if present, notify the healthcare provider • Monitor the blood platelet level • Instruct the patient to report signs of bruising or bleeding gums • Advise the patient not to drive a car or operate heavy machinery
Typical antipsychotics	<ul style="list-style-type: none"> • Extrapyramidal effects: dystonia (involuntary muscle contractions), tardive dyskinesia (uncoordinated, bizarre facial, tongue, trunk, or extremity movements), akathisia (involuntary restlessness and body movements), pseudoparkinsonism (shuffling gait, tremors, and drooling), akinesia (muscle weakness) • Neuroleptic malignant syndrome (hyperthermia, muscle rigidity, agitation, delirium, elevated BP and pulse, profuse diaphoresis) 	<ul style="list-style-type: none"> • Administer antiparkinsonian drugs • Administer anticholinergic drugs • Support the patient's airway, breathing, and circulation • Monitor creatine phosphokinase
Atypical antipsychotics	<ul style="list-style-type: none"> • Common: nausea vomiting, diarrhea, weight gain, insulin resistance • Serious: prolonged QT interval, tachycardia, syncope 	<ul style="list-style-type: none"> • Administer the medication with meals • Monitor weight and calories • Educate the patient about healthy eating habits • Perform a baseline ECG • Monitor serum electrolytes and fasting glucose
Antidepressants	<ul style="list-style-type: none"> • Common: insomnia, weight gain, nausea • Severe: mania, anxiety 	<ul style="list-style-type: none"> • Advise the patient to take the medication with meals • Educate the patient about healthy sleep habits • Monitor for increased activity, restlessness, and rapid speech; if present, notify the healthcare provider



Bipolar disorder classifications

cheat

sheet

Bipolar I	Bipolar II
Mania	Hypomania
Psychotic symptoms	No psychotic symptoms
Significant impairment	Mild to no impairment in daily functioning
Hospitalized often	Hospitalized rarely
Severe depression	Mild depression

lithium retention in the kidneys and quickly lead to toxic levels. In return, high lithium plasma levels can increase renal sodium excretion and lead to hyponatremia. Be aware of any other medications the patient is taking that can affect urine production, such as diuretics, because these medications

can alter lithium levels. Long-term lithium use can lead to renal failure, so it's important to monitor the patient's blood urea nitrogen and creatinine plasma levels.

Antiepileptic medications also play a key role in treating bipolar disorder. Divalproex stabilizes mood as effectively as lithium, but has adverse reactions such as blood dyscrasia and weight gain. Carbamazepine,

lamotrigine, and topiramate are other anti-epileptic drugs prescribed for the symptoms of mania and depression that occur in bipolar disorder. Divalproex and carbamazepine require regular blood work to ensure that their levels are within the therapeutic range. These medications are metabolized in the liver, so it's important to routinely monitor liver function.

Antipsychotic medications may be utilized alone or in combination with other drugs. Older antipsychotics, such as haloperidol, chlorpromazine, and perphenazine, play a key role in treating the psychotic symptoms that can occur with bipolar disorder. Adverse reactions, such as sedation, seizures, and extrapyramidal effects, can limit compliance with or use of these agents. Newer antipsychotics, such as olanzapine, risperidone, quetiapine, and ziprasidone, can be as effective as the older antipsychotics, but they, too, have their share of unwanted adverse reactions. Insulin resistance (leading to weight gain and diabetes) and ECG abnormalities may limit the use of these medications.

Antidepressants, such as fluoxetine, paroxetine, and venlafaxine, can be used in combination with other medications to treat depression in bipolar disorder. Because these medications can trigger a manic episode, it's important to assess for early symptoms of mania, such as a decreased need for sleep, high energy, or a labile mood.

Adverse reactions, from weight gain to life-threatening events, can occur with all of the medications used to treat bipolar disorder. If these reactions cause significant disruption of the patient's quality of life, compliance with treatment may be hampered. And for a patient with bipolar disorder, stopping a medication can be a trigger for relapse.

As with other psychiatric disorders, the kindling theory explains the persistence of the symptoms. Reactions or responses to stimuli escalate over time; with each episode, the mood disturbances become more severe and frequent. Preventing relapse and ensur-



On the web

General

- **American Psychological Association:**
<http://www.apa.org/topics/bipolar/>
- **Mayo Clinic:**
<http://www.mayoclinic.com/health/bipolar-disorder/DS00356>
- **National Alliance on Mental Illness:**
http://www.nami.org/Content/NavigationMenu/Mental_Illnesses/Bipolar1/Home_-_What_is_Bipolar_Disorder_.htm
- **National Institute of Mental Health:**
<http://www.nimh.nih.gov/health/topics/bipolar-disorder/index.shtml>
- **Stanford Bipolar Disorders Clinic:**
<http://bipolar.stanford.edu/bipolar.html>

In teenagers

- **KidsHealth.org:**
http://kidshealth.org/teen/your_mind/mental_health/bipolar.html

In older adults

- **University of Michigan Depression Center:**
<http://www.depressiontoolkit.org/bipolar/adults.asp>



ing compliance with treatment will result in a better prognosis and quality of life.

Treatment of bipolar disorder is most effective when psychosocial and medication therapies are combined. Psychotherapy, or “talk” therapy, can augment long-term treatment for a patient with bipolar disorder. The patient meets with a psychologist, social worker, or nurse practitioner either alone or in a group to discuss managing the illness, dealing with interpersonal problems, and responding to early symptoms of relapse.

Electroconvulsive therapy (ECT) may be recommended for a patient who doesn’t respond to standard therapy or for whom medications are contraindicated, such as in pregnancy. ECT can be used to effectively treat severe mania and depression, often allowing a person to begin participation in treatment.

Your support is needed

Because bipolar disorder is a chronic illness, you may encounter patients with this diagnosis in any setting. As with other chronic illness, assess the patient, provide a safe environment, monitor medication effects, and teach the patient about the disorder. Establishing a positive, supportive relationship is the first step in caring for a patient with bipolar disorder.

Suicide and homicide are possible dangerous consequences of the poor judgment and sadness that can accompany bipolar disorder. Any mention of the patient killing him or herself or others should be taken seriously. In many states, such threats are legal grounds for involuntary commitment to an inpatient psychiatric facility. Other red flags include feelings of hopelessness or helplessness, extreme anxiety, alcohol or drug abuse, and a personal or family history of suicide attempts.

Providing a highly structured, calm environment can prevent or decrease manic symptoms. When caring for a patient with bipolar disorder experiencing a manic episode, turn off the TV or radio, dim the lights, and try to eliminate loud conversation

key points

Nursing considerations

- Assess for signs of bipolar disorder in any setting.
- Establish a positive, supportive relationship.
- Provide a highly structured, calm environment.
- If the patient is manic, dim the lights and eliminate loud noises.
- Ensure adequate nutrition and hydration.
- Teach the patient about medication action and adverse reactions.
- Emphasize the need to take the medication at the same time and under the same circumstances.
- Monitor adverse reactions and intervene if necessary.
- Monitor labs for therapeutic levels and effects.
- Advise the patient not to drive or operate heavy machinery if drowsy.
- Assess for suicidal or homicidal behavior:
 - Is the patient having any thoughts of harming him or herself or others?
 - Does the patient have a plan to harm?
 - Does the patient have the means to carry out the plan?

around the patient. Pay attention to sleep patterns because any disturbances can indicate worsening illness. Also monitor the patient’s intake and output to ensure adequate nutrition and hydration.

It’s critical to educate the patient about all aspects of medication therapy. Emphasize the need to take the prescribed medications at the same time each day and under the same circumstances, such as with or without meals. Teach the patient about the expected actions and adverse reactions of prescribed medications. Monitor any adverse reactions and ensure therapeutic ranges with regular testing. Advise the patient that some adverse reactions, such as drowsiness, may improve over time; however, he or she must be careful driving or operating machines until the effects subside.

Taking medications is hard for patients with a chronic illness. Talk with the patient about concerns and financial barriers, and instruct him or her to call the prescriber before stopping any medication.

A social worker or psychologist may be consulted when planning for care at home or coordinating follow-up appointments. And remember that it’s important to include the patient’s family and other

support systems in care planning and assisting along the road to stability.

Understanding and caring

Nurses play a critical role in the identification and care of patients with bipolar disorder. Understanding this disorder and how to care for these patients will enhance the quality of the care you provide. ■

Learn more about it

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