Bipolar affective disorder
Symptoms and diagnosis

By Michele Sie, DipPsych, MRPharmS

Bipolar affective disorder (BPAD) is an illness that causes two distinct mood disturbances (poles): mania and depression. It has been a recognised illness since Aretaeus of Cappadocia, a Greek physician, first observed that melancholia and mania were, for some people, linked and that these conditions could switch or be present as a mixture of symptoms.

BPAD is classified into two types: bipolar I disorder, in which episodes of mood disturbance are predominantly manic with occasional depressive episodes; and bipolar II disorder, in which the episodes fluctuate between hypomania (a mood disturbance similar to mania but less severe) and depression. The World Health Organization estimates BPAD to be the seventh leading cause of “non-fatal burden of disease”\(^1\). In the UK treating BPAD costs the NHS an estimated £200m per year\(^2\). Those with BPAD have been shown to have a lower physical and mental quality of life compared with the general population\(^3\).

Epidemiology and aetiology
BPAD affects around 1–2% of the UK population. It has equal prevalence rates for men and women and an average age of onset of around 17 years. Although most people who experience a first bipolar episode go on to experience further episodes, 20% will recover fully\(^4\).

The underlying cause of BPAD is currently unknown, however there are some precipitating factors. A family history of any mood disorder doubles a person’s risk of developing BPAD. This implies a genetic element to the condition. However, no specific gene responsible for causing the condition has been identified. It is more likely that the genetic risk is reliant on small changes to several genes. Other factors that may increase the risk of developing BPAD include adverse experiences early in a child’s life, such as lack of attachment between the child and his or her caregiver, and exposure to stress.

Brain chemistry
The brain chemistry of patients with BPAD has been studied and several changes in

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**SUMMARY**

Bipolar affective disorder (BPAD) is a chronic relapsing-remitting condition associated with episodes of hypomania, mania and depression. During the course of the illness, recurrent episodes can be in the same pole or fluctuate between poles. It is a common condition, affecting 1–2% of the population.

Symptoms are disruptive and put a large burden on the individual in terms of quality of life, functional impairment and socioeconomic status. For most patients, symptoms are worsened by delay between the first presentation of symptoms and diagnosis (and treatment). Also, patients suffering from BPAD are at high risk of attempting suicide.

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Michele Sie is consultant pharmacist for women and children at West London Mental Health NHS Trust, based at St Bernard’s Hospital in Southall. E: michele.sie@wlmnht.nhs.uk
neurotransmitter levels have been observed. During mania, raised levels of dopamine, glutamate, noradrenaline and serotonin have been recorded, along with reduced levels of gamma-aminobutyric acid (GABA). During depression, reduced levels of serotonin, noradrenaline, dopamine, GABA and myo-inositol have been recorded, as well as raised levels of glutamate.

Precipitating factors Stressful life events, such as the death of a close relative or friend, moving house, changing jobs and physical illness, can increase the risk of a patient who has been diagnosed with BPAD developing a depressive episode during the subsequent six months.

Attainment of important goals (eg, passing an exam) has been associated with the onset of episodes of mania. Surprisingly, a bereavement (during the previous four months) has also been associated with causing mania.

Diagnosis

For a diagnosis of BPAD to be made, a patient must have experienced at least two episodes of illness where there were significant changes in mood and activity levels. These illness episodes (or mood disturbances) can manifest as hypomania, mania or depression.

A mixture of mania and depression is not necessary for a positive diagnosis to be made; two manic episodes can be sufficient. Patients who experience depressive and hypomanic episodes also fit the criteria for BPAD. However, patients who have only experienced depressive episodes would fit the criteria for unipolar depression, rather than BPAD.

Because the illness is relapsing-remitting, its presentation at any given time can differ. The International Classification of Disease version 10 criteria are used to describe patients’ current presentations (see Box 1).

Typical symptoms associated with each mood disturbance are described below.

Hypomania

Hypomania is characterised by a mild mood elevation with an increase in energy and activity that persists for at least four days. Increased activity may include excessive talking, overfriendliness, inappropriate sexual behaviour and increased libido, and a decreased need for sleep. However, these activities are not to an extent that leads to a severe disruption in functioning.

Mania

Mania is characterised by elated mood, overactivity, rapid speech that is hard to interrupt, lack of sleep, overspending, poor concentration, overinflated ideas of self importance and sexual disinhibition. Psychotic symptoms may or may not be present (see Box 2). Unlike hypomania, mania does lead to a severe disruption in functioning. For a positive diagnosis, hypomania must have been present for at least one week.

Bipolar depression

Bipolar depression has a similar presentation to that of unipolar depression. Symptoms fall into three categories: biological, somatic and psychological. Biological symptoms include changes in sleep patterns (eg, difficulty falling asleep or early morning wakening), changes in appetite, weight loss or gain, loss of libido and decreased energy.

Somatic symptoms, including many unexplained physical problems such as aches and pains caused by mental and emotional distress, may also be present and may be the initial complaint.

Psychological symptoms include low mood, diurnal mood variations, anhedonia (the inability to feel pleasure), poor concentration, feelings of worthlessness and suicidal ideation.

The following characteristics can help to distinguish bipolar depression from unipolar depression:

- The presence of psychosis
- Diurnal mood variation
- Hypersomnia (prolonged night-time sleep or excessive daytime sleepiness)
- A greater number of previous depressive episodes
- A history of short episodes of depression

Symptoms in children and adolescents

Criteria for diagnosing BPAD in children and adolescents have not been formally recognised in the UK, although they have been in the US. The symptoms of BPAD in patients under the age of 18 years are similar to those associated with attention deficit hyperactivity disorder (ADHD). These include inattention, distractibility, impulsivity, psychomotor agitation and poor sleep. However, some differences have been observed that may help to

Box 1: Classifications of BPAD

According to the International Classification of Disease version 10 criteria, a patient who has been diagnosed with bipolar affective disorder may be classified into the following categories:

- Current episode hypomanic
- Current episode manic without psychotic symptoms
- Current episode manic with psychotic symptoms
- Current episode mild or moderate depression
- Current episode severe depression without psychotic symptoms
- Current episode severe depression with psychotic symptoms
- Current episode mixed
- Currently in remission
- Other bipolar affective disorders (eg, bipolar II disorder, recurrent manic episodes)
- Unspecified

Box 2: Psychotic symptoms

When patients who are diagnosed with BPAD experience severe episodes of mania or depression, psychotic symptoms (eg, hallucinations and delusions) can be present. The content of the psychotic symptoms depends on the pole of the mood disorder.

In manic episodes, delusions tend to be grandiose (ie, where false beliefs commonly manifest as an elevated sense of self worth), such as having special powers or being an important public figure. Often a belief of excessive wealth can lead to overspending and increased debt.

In depressive episodes, hallucinations can be of a self-dysphoric nature and delusions can be of worthlessness.

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cocaine (9%), sedatives (8%), opiates (7%) and hallucinogens (6%). Those with bipolar I disorder are more likely than those with bipolar II disorder to carry out substance misuse (45% vs 31%).

**Getting the diagnosis right**

Symptoms of mania and depression can be caused by medical conditions, adverse effects of medicines and psychoactive substances. These should be considered and treated as necessary to exclude them as causes of illness.

**Disguised as mania** Hyperthyroidism can present as a manic state, with symptoms including difficulty in concentrating or making decisions, memory problems, racing thoughts, insomnia, mood swings and irritability. Cushing’s syndrome, Addison’s disease and vitamin B12 deficiency have also been reported to cause manic symptoms.

Organic brain syndromes, including head injuries, brain tumours, stroke, epilepsy and frontal-lobe dementias, can cause manic symptoms that can be hard to distinguish from a nonorganic mood disorder.

Psychoactive substances that can induce mania include amphetamines, cannabis, khat, ecstasy, LSD and cocaine. Symptoms generally resolve around seven days after withdrawal of the substance involved.

**Disguised as depression** Hypothyroidism can present as depression. Once the patient has been treated with levothyroxine the depression usually resolves. Other disorders that have been shown to increase the risk of depression include diabetes, anaemia, cardiac disease, Cushing’s syndrome, Addison’s disease and hyperprolactinaemic amenorrhoea.

Chronic alcohol misuse can cause the symptoms of major depression in some individuals. However, most of these people will no longer experience depressive symptoms once alcohol detoxification has been completed.

Medicines that have been most commonly associated with inducing depressive symptoms include antipsychotics, beta-blockers, calcium-channel blockers, contraceptives, interferon and corticosteroids.

**Baseline tests** The following baseline tests should be carried out for those with a suspected diagnosis of BPAD to exclude any physical conditions:

- Thyroid function tests (to assess for hypothyroidism)
- Liver function tests (to assess alcohol use)
- Full blood count (to exclude anaemia)
- Urine drug screening (to rule out substance misuse)

**Suicide**

BPAD is associated with an increased risk of suicide — 10 times that for the general population. Around one third of sufferers admit to attempting suicide at least once...
during their life. Around 10–20% of those with BPAD succeed in taking their own lives. These individuals account for around 35% of all suicides — the largest single group. 

Rapid cycling and mixed affective states have also been associated with an increased risk of suicide and suicidal behaviour, particularly in men.

In 1999, the Department of Health report “Saving lives: our healthier nation” set a target of reducing the rate of suicide in the UK by at least 20% by 2010. The latest report on the progress made towards achieving this target was published by the Department of Health in 2006. It indicated that the rate of suicide in England had fallen from 9.2 deaths per 100,000 population in 1995–97 to 8.5 deaths per 100,000 population in 2003–05 (a reduction of 7.4%). Continued assessment of suicide risk in those with BPAD would appear essential for ensuring the 2010 target is met.

References