

clonidine) may be useful if autonomic symptoms are present. Anticonvulsant agents (gabapentin, topiramate, and oxcarbazepine) are used when other agents are ineffective.  $\beta$ -Blockers help with performance anxiety.

Co-occurrence of the inattentive type of attention-deficit/hyperactivity disorder (ADHD) and an anxiety disorder is common. When using a stimulant, it is advisable to start at a low dose, increasing slowly to minimize the risk of increasing anxiety.

For PTSD, antidepressants may be augmented by clonidine (also useful in hyperarousal and impulsivity) in the presence of severe affective dyscontrol. Atypical antipsychotics are used if self-injurious behavior, dissociation, psychosis, and aggression are present. Atomoxetine is useful in PTSD with concurrent ADHD.

## Chapter 18

# DEPRESSION AND BIPOLAR DISORDERS

## DEPRESSION

**Major depressive disorder (MDD)** requires a minimum of 2 weeks of symptoms, including either depressed mood or loss of interest or pleasure in nearly all activities. Four additional symptoms must also be present (Table 18-1). In children and adolescents, a new onset of irritability, restlessness, or boredom may be seen instead of depressed mood. A sudden drop in grades is often present. A change in appetite (usually decreased but can be increased) with carbohydrate craving with or without accompanying weight changes and sleep disturbance along with somatic complaints (fatigue, vague aches and pains) may also be present. Psychotic symptoms, seen in severe cases of major depression, are generally mood-congruent (e.g., derogatory auditory hallucinations, guilt associated delusional thinking). Suicidal thoughts and attempts are common and should be evaluated.

The prevalence of MDD in prepubertal children is 2% with 1:1 female-to-male ratio; in adolescents the prevalence is 6% to 8%, with a female-to-male ratio of 2:1 (similar to adults). If untreated, major depression can become chronic in 10% of patients.

Depression has a clear genetic predisposition, with family history as the strongest single factor for developing MDD. Twin studies show 40% to 65% heritability for depression. Family studies show a twofold to fourfold increased risk for depression in offspring of depressed parents. Other potential responsible factors for depression include dysregulation of central serotonergic and/or noradrenergic systems, hypothalamic-pituitary-adrenal axis dysfunction, and the influence of pubertal sex hormones. The stress-diathesis model relates to the interaction of genes and environment; for example, a less functional genetic variant of the serotonin receptor in presence of stressful life events could contribute to depression.

**Table 18-1** Criteria for Diagnosis of a Major Depressive Episode

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|----|---|
| A. | Five or more of the following symptoms present during the same 2-week period and represent a change from previous functioning; at least one of the symptoms is either (1) depressed mood or (2) loss of interest or pleasure. Note: Do not include symptoms that are clearly due to a general medical condition or mood-incongruent delusions or hallucinations |
| 1. | 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, mood can be irritable.  |
| 2. | Markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day (as indicated by subjective account or observation by others)  |
| 3. | Significant weight loss when not dieting or weight gain 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)  |
| 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 self-reproach or guilt about being sick)  |
| 8. | Diminished ability to think, concentrate, or be decisive nearly every day (subjective account or as observed by others)   |
| 9. | Recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without a specific plan, a suicide attempt or a specific plan for committing suicide  |
| B. | The symptoms do not meet criteria for a mixed manic 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 physiologic effects of a drug or abuse, a medication, or a general medical condition (e.g., hypothyroidism).   |
| E. | The symptoms are not better accounted for by bereavement, and the symptoms persist >2 mo or are characterized by marked functional impairment, morbid preoccupation with worthlessness, suicidal ideation, psychotic symptoms, or psychomotor retardation.  |

Dysthymic disorder and anxiety disorders (prevalence 30% and 80%, respectively), substance abuse (20% to 30%), and disruptive behavior disorders (10% to 20%) are frequent comorbid disorders in depressed children and adolescents. Twenty percent of patients diagnosed with depression develop bipolar disorder (BD); this is more common in cases with a family history of mania or concurrent psychotic features.

The differential diagnoses for MDD are diverse and many. It is always prudent to rule out mood disorder due to a general medical condition or substance-induced mood disorders before considering MDD. Schizophrenia in its initial stages and the dysphoria related to untreated attention-deficit/hyperactivity disorder (ADHD) may also be mistakenly diagnosed as depression. Hypothyroidism, anemia, diabetes, and folate and B<sub>12</sub> vitamin deficiencies need to be ruled out.

**Dysthymic disorder** (prevalence rate 0.6% to 1.7%) is a chronic, milder form of depression characterized by a depressed or irritable mood (subjectively or described by others) present for at least 1 year. Two of the following symptoms