

Mood Disorders in Chronic Headache (2006)

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Numerous epidemiological and clinical research studies have confirmed elevated risk of mood disorders in migraine, as well as in chronic daily headache. The population studies examining the relationship between migraine and major depression have odds ratios varying from 2.2 to 4.0. There is about a threefold higher relationship between migraine and bipolar spectrum disorders, with a stronger relationship for migraine with aura than for migraine without aura. There appears to be a bi-directional relationship between migraine and depressive disorder. Migraine increases the risk for first onset of major depression and depression increases the risk for the first onset of migraine. In clinical samples, both migraine and tension-type headache have shown consistent associations with mood disorders, and these associations appear to be greater in the chronic daily headache group.

Major depressive disorder is characterized by one or more major depressive episodes, where a patient suffers for at least two weeks with depressed mood or loss of interest or pleasure in previously enjoyed activities, accompanied by at least four more symptoms of depression (DSM-IV criteria). These include appetite disturbance, sleep problems, psychomotor changes, decreased energy, feelings of worthlessness or guilt, indecisiveness or concentration changes and recurrent thoughts of death or suicidal thoughts.

Physical symptoms are very significant in the diagnosis of depression and the majority of patients present exclusively with physical symptoms. Dysthymic Disorder is a chronic, lower-grade depression that does not meet the full criteria for major depression and exists for most days for at least two years. These are individuals who consistently and globally view their world as a "glass half empty." A subset of patients suffers from double depression, occurring when major depressive episodes are superimposed on dysthymia.

Depression is frequently undiagnosed or untreated and it is often undertreated even when correctly diagnosed. The majority of patients with major depression have more than one episode, and there appears to be an increased risk for future episodes with each recurrence. Depressive disorders have a high rate of comorbidity with anxiety disorders and substance abuse. The interplay of mood/anxiety disorder and medication overuse may be a significant factor in the chronification of episodic headache.

Bipolar spectrum disorders are usually life-long disorders characterized by episodes of mania, depression, or co-existing mixed states. The defining feature of bipolar disorder is mania, the presence of which serves to differentiate bipolar disorders from other mood disorders. The cardinal symptoms of a manic episode include extremely elevated, euphoric, expansive, or irritable mood that persists for at least 1 week and disrupts social and/or occupational functioning. Associated features include impulsivity, grandiosity, talkativeness, decreased need for sleep, increased goal-directed activities, impaired judgment and disinhibition, as well as excessive involvement in pleasurable but potentially risky activities. A diagnosis of bipolar I disorder requires that a patient have at least 1 manic episode with or without a history of a major depressive episode. Bipolar disorder can be particularly lethal as approximately 25-30% of bipolar I patients attempt suicide.

Mania can be of varying severity, and milder episodes are termed hypomania. Bipolar II disorder is diagnosed when the patient has experienced one or more episodes of major depression and at least one hypomanic episode, the latter of which must last for at least 4 days. Bipolar II disorder is often misdiagnosed as major depressive disorder as depressive episodes are more frequent and take a greater toll on patients. Some patients may present as part of a mixed state, in which depression occurs conjointly with mania or hypomania. They tend to exhibit significant irritability, racing thoughts and agitation and may have suicidal ideation and/or aggressive behavior. Making a correct diagnosis is extremely important, as the presence of bipolarity suggests the use of mood stabilizing agents. Antidepressants alone may induce mania or lead to a rapid cycling course for the disorder.

A primary mood disorder diagnosis cannot be secondary to an underlying medical condition or due directly to substances that may influence mood. In practice, many medical disorders and mood disorders, particularly depression, often coexist and it is essential to educate the patient about comorbidity and treat both disorders. Comorbid depression may negatively affect adherence to treatment of many medical conditions including headache.

The clinical interview is the core of the assessment process. Many headache patients are fearful that their physician believes that their symptoms are “all in their head” and are reluctant to reveal any psychological changes. Therefore, it is often helpful to ask about depression symptomatology as “secondary” to headache. There is a common misconception that asking about suicidal thoughts or plans may actually increase the risk of suicide. In actuality, most patients with suicidal ideation show relief when a concerned physician broaches the topic.

Treatment of major depressive disorder has been divided into acute, continuation, and maintenance phases for pharmacotherapy as well as for depression-specific psychological therapies. In the acute phase, the clinician attempts to maximally reduce symptoms, preferably with complete remission. Continuation phase treatment attempts to prevent relapse, as there is approximately a 40% to 60% risk of relapse if an antidepressant medication is discontinued during the first few months after a positive response. Treatment needs to be continued for about six to nine months after inducing remission. Maintenance phase aims to prevent recurrences in those at risk for future episodes and for those patients with chronic depression.

Most antidepressant agents enhance serotonin or norepinephrine transport by inhibiting reuptake at the synaptic cleft. These several classes of drugs include selective serotonin reuptake inhibitors (SSRI's), nonselective tricyclics (TCA's) that are typically dual action agents that inhibit both the reuptake of serotonin and norepinephrine in varying degrees, and more selective serotonin-norepinephrine reuptake inhibitors (SNRI's). Other agents include mirtazapine, which acts on the alpha-2 autoreceptor, and bupropion, which most likely inhibits norepinephrine and dopamine reuptake. The choice of drug is typically based on pharmacokinetic factors, comorbid medical conditions, previous response or family history of a response, adverse effects, and adherence.

Depression-specific psychotherapies such as cognitive-behavioral therapy (CBT) and interpersonal psychotherapy have been found to be similar in effectiveness to tricyclic antidepressants in acute-phase outpatients with major depressive disorder and to delay relapse over a longer time period. Combination pharmacotherapy and psychotherapy is associated with a higher improvement rate than medication treatment solely. These combination treatments may be particularly helpful in chronic depression.

Acute mania can be a medical emergency and is typically treated with one of the atypical neuroleptics with the addition of a mood stabilizer. Lithium, valproate, carbamazepine and the atypical antipsychotics have proven efficacy for the treatment of acute mania. The biggest challenge in managing bipolar disorder is treating bipolar depression. Acute treatment of bipolar depression often requires both a mood stabilizer and an antidepressant. Lamotrigine has shown efficacy in the prophylaxis of bipolar depression and may also have more direct antidepressant properties without inducing switching to hypomania or mania. Interpersonal and cognitive psychotherapies have been adapted for bipolar disorder to aid medication adherence, regulate daily rhythms, manage stressors and notice warning signals for mood switches.

Migraine and chronic daily headache sufferers are at higher risk for mood disorders than are individuals in the general population. It is essential to assess mood as untreated or undertreated mood disorders may make these individuals more refractory to headache treatment.