GENERAL RECOMMENDATION:

Primary care practitioners should recognize the distinct anxiety disorders that are common in persons with HIV infection.

Anxiety is a common symptom in patients with HIV infection. When anxiety is severe or persistent, patients may have an anxiety disorder. These disorders include adjustment disorder, obsessive compulsive disorder (OCD), panic disorder, post-traumatic stress disorder (PTSD), and generalized anxiety disorder. Primary care practitioners need to be aware of the differences among the specific disorders in order to appropriately treat or refer patients and to help them receive optimal care. People with histories of anxiety disorders or major depression and those with limited social support are particularly susceptible, although anyone can experience severe anxiety during the course of HIV infection. As HIV disease progresses, anxiety may increase.

I. DIAGNOSIS

RECOMMENDATIONS:

When patients present with common medical symptoms (e.g., chest pain, diaphoresis, dizziness, gastrointestinal disturbances, and/or headache), practitioners should consider anxiety disorders when medical etiologies can not be established.

Primary care practitioners should be aware that disturbances of sleep patterns, which may result from illness or medication schedules, may lead to symptoms of anxiety and poor concentration during the day. Sleep management should be an adjunctive component of treatment in these patients.

If the diagnosis of anxiety disorder is difficult to establish or the patient does not respond to the initial medication choice, the patient should be referred to a psychiatrist.

A diagnosis of panic disorder or panic attack should be considered if the patient experiences episodic anxiety with multiple, overwhelming somatic symptoms that adversely affect his or her life (e.g., the patient dreads having another attack and avoids situations that might evoke panic) or the symptoms are sufficiently severe to require repeated emergency room visits.

If the patient does not have panic disorder, practitioners should next determine if the patient has generalized anxiety disorder or adjustment disorder.
Underdiagnosed in the primary care setting, anxiety overlaps with many other common medical disorders with respect to symptoms such as chest pain, diaphoresis, dizziness, gastrointestinal disturbances, and headache. Practitioners should, therefore, consider both psychological causes (e.g., anxiety disorders) and medical etiologies. In addition to somatic complaints, people with anxiety disorders may also present with fear, insomnia, difficulty concentrating and remembering, diminished appetite, ruminations, compulsive rituals, and the need to avoid situations that make them anxious.

A. Distinguishing Among Panic Disorder, Generalized Anxiety Disorder, and Adjustment Disorder

The practitioner should ask the patient the following questions to assist in the diagnosis of anxiety disorders:

- Are you feeling so restless that you experience difficulty in falling asleep?
- Once you fall asleep, do you have trouble staying asleep?
- Do you have trouble concentrating on things such as reading a book or watching television?
- Do you become easily annoyed or irritated?
- Are you anxious most of the time?

After medical illnesses have been excluded, practitioners should use a structured approach for distinguishing and treating panic disorder, generalized anxiety disorder, and adjustment disorder (see Figure 8-1). Positive answers to the following questions with absence of physical findings to explain the symptoms should enable the practitioner to determine if the patient is experiencing a panic attack:

- Did your heart race, skip, or pound?
- Did you sweat?
- Did you tremble?
- Were you short of breath?
- Did you feel as if you were choking?
- Did you have chest pain, tightness, or pressure?
- Did you have nausea or an upset stomach?
- Did you feel dizzy or faint?
- Did you feel unreal or detached from yourself?
- Did you feel as if you were losing control or going crazy?
- Were you afraid you were dying?
- Did you have tingling or numbness?
- Did you have chills or hot flashes?
Persistent anxiety (for months or years) without a specific stressor that interferes with functioning is the hallmark of generalized anxiety disorder. Acute anxiety (for hours or weeks) in response to a stressor is the hallmark of adjustment disorder with anxious mood. When the stressor is chronic, as in the case of chronic illness, the adjustment disorder can become chronic.

B. Medical Conditions and Medications That May Cause Anxiety

RECOMMENDATIONS:

Practitioners may need to exclude HIV-related central nervous system (CNS) disease or other medical conditions in patients who present with severe anxiety.

Practitioners should review the medication regimens of patients who present with sudden onset of anxiety without clear emotional cause and should obtain a thorough substance use history.

Patients can present with anxiety-like symptoms due to delirium, other medical conditions, medications (see Table 8-1), or substance use. For example, anxiety may be triggered by CNS pathologies, including HIV-related infections, hypoxia, decreased perfusion of the brain, sepsis, delirium, dementia, metabolic imbalances, or endocrinopathies. In addition, patients may present with anxiety from the effects of withdrawal from caffeine, nicotine, alcohol, cocaine, and other amphetamines.
II. TREATMENT

A. Psychological/Supportive Intervention in the Primary Care Setting

When anxiety is present but does not affect patients' functioning, medication may not be needed. The primary care practitioner will find the following supportive strategies to be helpful:

- Identifying the psychological factors that contribute to anxiety (see Table 8-2).
- Expressing empathy.
- Reassuring patients about the cause of the physical symptoms experienced in panic/anxiety.
- Identifying patients' strengths and resources, such as support systems, which may be used to ease their anxiety.
- Teaching patients simple relaxation exercises. Slow, deep breathing can be very helpful in managing anxiety.

<table>
<thead>
<tr>
<th>Category</th>
<th>Medications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antihypertensives</td>
<td>Reserpine, Hydralazine</td>
</tr>
<tr>
<td>Antituberculosis agents</td>
<td>Isoniazid, Cycloserine</td>
</tr>
<tr>
<td>Neuroleptics</td>
<td>Haloperidol, Chlorpromazine, Risperidone</td>
</tr>
<tr>
<td>Sympathomimetics</td>
<td>Ephedrine, Epinephrine, Dopamine, Phenylephrine, Phenylpropanolamine, Pseudoephedrine</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>Amphetamine and methylphenidate, Digitalis, Levodopa, Lidocaine, Monosodium glutamate, Nicotinic acid, Procarbazine, Steroids, Theophylline and aminophylline, Thyroid preparations</td>
</tr>
</tbody>
</table>

TABLE 8-1
MEDICATIONS THAT MAY CAUSE ANXIETY-LIKE SYMPTOMS IN HIV PATIENTS

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be helpful. The Jacobson method of progressive relaxation can also be beneficial. This technique involves systematic tensing and relaxing of muscle groups, starting with the feet and gradually involving the rest of the body. Patients' tension decreases as they become aware of and learn to release muscle tightness. Although such strategies may be quite helpful, patients in great distress may require medication, psychotherapy, or specialized behavioral treatments. For these patients, referral to a mental health professional for assessment and treatment is recommended (see Appendix IV).

**TABLE 8-2**

**COMMON PSYCHOLOGICAL FACTORS THAT CONTRIBUTE TO ANXIETY**

- Loss of control over one's body and little or no knowledge about what medical problems might occur next
- Loss of functional ability leading to an increased sense of dependency
- Fear of pain
- Fear of one's mortality; anxiety not only about death but also about dying
- Fear of rejection by loved ones
- Fear of isolation
- Fear about how one's survivors (e.g., children, family, and significant others) will carry on
- Fear of consequences of medical treatment failure

**B. Pharmacologic Intervention in the Primary Care Setting**

**RECOMMENDATIONS:**

Practitioners with patients whose anxiety interferes with their sleep or daily functioning may prescribe benzodiazepines to be used on an as-needed basis. The prescription should be limited to 2 to 4 weeks of medication.

Practitioners should use caution when treating patients with hepatic damage for anxiety because most benzodiazepines are metabolized by oxidation; lorazepam, oxazepam, and temazepam may be used, as they are metabolized primarily by glycosylation. Due to interactions, alprazolam, midazolam, and triazolam should be avoided when patients are receiving protease inhibitors.
When psychopharmacologic treatment becomes necessary for HIV-infected patients with panic disorder, generalized anxiety disorder, or adjustment disorder, practitioners should generally “start low and go slow” when prescribing medications (see Table 8-3).

<table>
<thead>
<tr>
<th>Disorder</th>
<th>Drug</th>
<th>General Comments</th>
<th>Specific Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Panic disorder</td>
<td>SSRI, TCA, BDZ</td>
<td>Premedicate with BDZ (for 3 days); begin SSRI (first-line); taper BDZ after 2 weeks</td>
<td>Begin at low doses</td>
</tr>
<tr>
<td>Generalized anxiety disorder</td>
<td>Buspirone, SSRI, BDZ</td>
<td>First-line; preferable for patients with CNS pathology (see following text)</td>
<td>Begin at low doses</td>
</tr>
<tr>
<td>Adjustment disorder with anxious mood</td>
<td>BDZ</td>
<td>Use as needed</td>
<td>Begin at low doses</td>
</tr>
</tbody>
</table>

* Abbreviations: BDZ, benzodiazepine; TCA, tricyclic antidepressant; SSRI, selective serotonin re-uptake inhibitors.
† Certain BDZs are preferable in patients with liver disease or on protease inhibitors.

People with HIV infection, especially those who are symptomatic, are more sensitive to medication side effects. These patients may also respond to lower doses of anxiolytics than those usually prescribed for the general population. Furthermore, because these patients are often on multiple medications, the potential for drug-drug interactions is great. Benzodiazepines, buspirone, SSRIs, and TCAs are among the various medications that may be used for treating panic disorder, generalized anxiety disorder, and adjustment disorder. Each has interactions with HIV medications, and Appendix I should be carefully reviewed.

1. Benzodiazepines

Benzodiazepines can be useful for the management of panic disorder, either as a primary or adjunctive treatment, as well as adjustment disorder with anxious mood when the patient’s anxiety interferes with his/her sleep or daily functioning, but the potential for abuse must be considered. Benzodiazepines may be prescribed for use on an as-needed basis. Benzodiazepines are behaviorally reinforcing drugs and produce both physical and psychological dependence when used too long or at too high dosage levels. Liability for addiction should be considered prior to the use of these agents, and their use should be strictly
time limited. Under these circumstances, prescription of benzodiazepines is usually limited to a time span of not more than 2 to 4 weeks.

Benzodiazepines are available in long-acting (diazepam, clonazepam) and intermediate- to short-acting (alprazolam, lorazepam, oxazepam) forms. Because most benzodiazepines are metabolized by oxidation, caution must be used when treating patients with hepatic damage. Lorazepam, oxazepam, and temazepam, however, are metabolized primarily by glycosylation, and as this metabolic pathway is relatively well preserved in the presence of liver damage, it would be preferable to use these benzodiazepines in patients with this condition. Several benzodiazepines (most significantly alprazolam, midazolam, and triazolam) have significant interactions with protease inhibitors and non-nucleoside reverse transcriptase inhibitors; Appendix I should be consulted before prescribing. In patients with CNS pathology, the use of benzodiazepines may lead to confusion or disinhibition. Therefore, in such patients who also have persistent anxiety, the use of buspirone or low-dose antipsychotics instead might be beneficial.

- Long-acting benzodiazepines have the advantage of a lower potential for short-term withdrawal effects but the disadvantages of longer elimination half-lives and accumulation. These medications can be preferable for patients who currently need several doses per day of a shorter-acting agent. Oral clonazepam 0.5 mg every 8 hours on an as-needed basis is an appropriate starting dose.

- Intermediate- to short-acting benzodiazepines can be eliminated from the system more quickly, which is an advantage when patients experience side effects. However, shorter-acting agents such as alprazolam may predispose patients to withdrawal symptoms after sudden discontinuation or even between doses. Oral alprazolam 0.25 mg every 4 to 6 hours as needed and oral lorazepam 0.5 mg every 4 to 6 hours as needed are appropriate starting doses.

2. **Buspirone**

When patients have persistent anxiety (i.e., generalized anxiety disorder), medication may be required on a continual basis. In these situations, prescription of buspirone instead of a benzodiazepine may be indicated. However, since buspirone takes up to 3 to 6 weeks to be effective, practitioners may wish to initially prescribe a benzodiazepine as well and taper it later. Oral buspirone can be started at 5 mg two times a day and increased to a total of 60 mg per day. This medication may be particularly helpful for patients with anxiety and a history of alcohol dependence as there is no potential for abuse.
3. **Selective Serotonin Re-uptake Inhibitors and Tricyclic Antidepressants**

SSRIs are now the medication of choice for treating panic attacks because of their efficacy and side-effect profile. TCAs are also effective but can have troubling side effects. SSRIs can also be used as first- or second-line treatment for generalized anxiety disorder.

The majority of patients with depressive disorders who are seen in the primary care setting also have symptoms of anxiety. Mixed anxiety-depressive conditions should be treated with an antidepressant as the first-line single agent, not with an anxiolytic. For treatment guidelines, see Chapter 6: *Depression and Mania in Patients With HIV/AIDS*. Due to significant interactions between these medications and antiretroviral agents, consult Appendix 1 before prescribing.

4. **Other Pharmacologic Choices**

Barbiturates and meprobamate can be effective anxiolytics, but they are not recommended treatments because of their side-effect profiles and potential for addiction. Barbiturates not only have a small therapeutic window, but they may lead to cognitive deficits. Meprobamate may lead to liver toxicity.

C. **Treating Patients With More Complex Anxiety Disorders**

**RECOMMENDATION:**

Practitioners should refer patients who use substances and experience persistent anxiety, as well as patients who experience panic attacks, PTSD, or OCD, to mental health professionals.

Persistently anxious patients with HIV infection who also use substances are a challenge for primary care practitioners to manage. One helpful technique to use with particularly demanding substance users who insist that they need higher dosages, early refills, or early appointment dates or who repeatedly challenge the practitioner’s recollection is to retain copies of prescriptions and appointment cards in patient files. Such patients, along with patients diagnosed with anxiety disorders that are more difficult to treat (e.g., PTSD, OCD, or panic attacks), should be referred to mental health practitioners. If these patients refuse referral for psychiatric evaluation and treatment, primary care practitioners may then need to address such issues as denial and, in some cases, should not prescribe medication until the patient accepts referral.

Differing opinions exist in regard to prescribing benzodiazepines for patients with anxiety disorders who are also substance users. Although most practitioners prefer to attempt other treatments before
using these medications, some substance-using patients do benefit from benzodiazepines. In these cases, practitioners should inform patients about the long-term risks of abuse and have patients agree to the contract outlined in Table 8-4.

### Table 8-4
**Terms of Agreement for Substance-Using Patients Using Benzodiazepines**

- Practitioner will never prescribe more than a 30-day supply of benzodiazepines.
- Family and friends will monitor patient’s adherence to the medication regimen.
- Practitioner will not provide additional benzodiazepines if patient uses up his/her monthly supply of medication early.
- Practitioner will provide only one replacement if patient loses his/her prescription; if patient loses a second prescription, there will be no replacement—no matter what explanation is provided.
- Practitioner will always write prescriptions for generic medications (name brands have greater street value).
- Practitioner will clearly document treatment plans so that policies will not be changed in their absence.