As the conflict in Iraq continues, public health authorities in the United States anticipate that many returning soldiers will suffer from posttraumatic stress disorder (PTSD). Initially, most of these veterans are likely to consult their primary care physicians about health problems. However, the diagnosis of PTSD is often missed in primary care settings. The author encourages physicians to become better prepared to recognize this disorder in their patients and initiate proper treatment or appropriate referral. Current diagnostic approaches and treatment modalities for combat-related PTSD are reviewed—with an emphasis on clinical procedures for the primary care physician.

Since the terrorist attacks on the United States on September 11, 2001, the US military has become involved in two major military conflicts in the Middle East. The conflicts in Afghanistan and Iraq could be prolonged struggles. As patients’ initial clinical contacts, primary care physicians across the country undoubtedly will be seeing increasing numbers of patients with combat-related mental health disorders, including posttraumatic stress disorder (PTSD). Thus, physicians need to be prepared to diagnose these disorders and treat these patients. Unfortunately, the diagnosis of PTSD is often missed in the primary care setting.

In a study involving 746 veterans, Magruder et al1 found that physicians in primary care clinics recognized PTSD in only 40 (46.5%) of 86 patients who were identified with this diagnosis by the Clinician Administered PTSD Scale for DSM-IV (Diagnostic and Statistical Manual of Mental Disorders, 4th Edition).

The present article reviews mental health problems that are commonly seen by primary care physicians as a result of patients’ participation in combat, focusing on approaches to the diagnosis and management of PTSD, which is the most prominent of these disorders.

Stressors Faced By Soldiers in Modern Warfare
American soldiers face a number of stressors that may contribute to the development of PTSD, many of which are unique to modern warfare. Stressful war experiences described by veterans returning from the conflict in Iraq include the following:

- combat exposure—including such experiences as firing weapons and being fired upon; being in danger of injury or loss of life; seeing destroyed villages and refugees; and being exposed to the sights, sounds, and smells of human death
- life-threatening events, including fear and sustained anticipatory anxiety about exposure to combat
- concerns about possible exposure to biological, chemical, and radiological weapons, including fears about the long-term health effects of such exposures
- difficult living and working conditions, including lack of desirable food, lack of privacy, poor living arrangements, uncomfortable weather, cultural differences, long working hours, and boredom
- concerns about how deployment may adversely affect career, family, and other personal matters
- unpredictability of length of deployment, including the possible ongoing redeployment for National Guard and US Army Reserve troops
- sexual and gender harassment, particularly among enlisted women
- ethnocultural stressors for minority soldiers, particularly those of Arabic descent or faith

In addition to these stressors, soldiers also face concerns regarding terrorist tactics. As widely noted in the public media, soldiers in these settings often have difficulty determining whether the civilians they encounter are would-be suicide bombers. Because of the changing nature of warfare in the 21st century, the “frontline” has subsumed individuals in many active-duty support roles that, when compared to combat-ready troops, had previously been considered “safe” (eg, truck drivers, medical personnel). Finally, soldiers currently serving in the Middle East combat theater also confront the potential of abuse or execution if captured as well as the possible mutilation and desecration of their bodies by the hands of enemy combatants.
Psychiatric Disorders Resulting From Exposure to Military Conflict

Modern warfare—with its atmosphere of confusion, uncertainty, and the always-present potential for injury and death—could easily result in mental distress and mental disorders for soldiers. A survey of more than 11,400 veterans of the 1991 Persian Gulf War revealed that approximately 10% of returning veterans had symptoms of PTSD. In a 2004 US Army study of more than 3,600 veterans returning from Afghanistan or Iraq, researchers found that the percentage of veterans meeting screening criteria for major depression, generalized anxiety, or PTSD was 9.3% for those who served in Afghanistan and 17.1% for those who were stationed in Iraq.

The psychiatric differential diagnosis for military patients is broad and varies depending on several factors, including the type and severity of traumatic exposure and the time that has passed since the precipitating event. Following exposure to severe trauma, mental disorders tend to occur in three sequential phases. In the immediate phase—during or immediately after traumatic events—individuals may experience feelings of anxiety, confusion, disbelief, fear, and numbness. Such problems as acute stress disorder, adjustment disorders, brief psychotic disorder, substance abuse or dependence, and numbness. Such problems as acute stress disorder, adjustment disorders, brief psychotic disorder, substance abuse, and exacerbation of preexisting mental illness are considerations. In the delayed phase (generally up to 2 weeks after trauma), individuals may experience apathy, autonomic arousal, grief, intrusive thoughts, social withdrawal, or somatic symptoms. Differential diagnoses at this point include anxiety disorders, depressive disorders, psychotic disorders, somatoform disorders, and substance abuse, as well as early PTSD. Later, in the chronic phase (months to years after precipitating events), patients may report feelings of disappointment, resentment, sadness, and persistent intrusive symptoms. Diagnoses to consider in this phase include PTSD; depression, dysthymia, and other mood disorders; schizophrenia and other psychotic disorders; and substance abuse or dependence.

Veterans seeking treatment in the civilian sector will usually be in the chronic phase of illness. Thus, the present article focuses on PTSD and related disorders, which are the most common mental health problems expected to occur in this cohort. Although this article focuses on treatment of veterans of modern warfare, the same principles of diagnosis and treatment may apply to any patient with PTSD, regardless of the type of stressor that induced the disorder.

Response to traumatic stress varies from person to person. Yet, under sufficient stress, anyone can succumb to mental disturbance. It is normal to have time-limited posttraumatic stress responses that do not persist or impair functioning. Such responses are often necessary for survival. However, when catastrophic stress overwhelms adaptive coping responses, posttraumatic psychiatric disorders result.

Acute Stress Disorder

In the acute phase of abnormal response to trauma (<4 weeks after trauma), the cluster of symptoms is referred to as acute stress disorder. This disorder is rarely seen by primary care physicians. Based on the criteria established in the Text Revision of the DSM-IV, a patient diagnosed with acute stress disorder must, following a traumatic event, have at least three dissociative symptoms (eg, depersonalization or derealization, dissociative amnesia), one or more symptoms of reexperiencing the trauma (eg, flashback episodes), symptoms of anxiety or increased arousal (eg, exaggerated startle response), and marked avoidance of stimuli- arousing recollections of the trauma. These symptoms must cause clinically significant difficulties in functioning and persist from 2 days to 4 weeks. Acute stress disorder is considered a precursor to PTSD.

Posttraumatic Stress Disorder

When the pathologic response to trauma lasts more than 4 weeks, it is referred to as PTSD. Patients with PTSD develop symptoms in three categories: reexperiencing the trauma, avoiding stimuli associated with the trauma, and increased autonomic arousal. Trauma may be reexperienced as distressing recollections and dreams, flashbacks (in which the patient may feel and act as if the trauma were recurring), and psychologic or physiologic stress reactions upon exposure to stimuli associated with the trauma. Symptoms of avoidance include efforts to refrain from thoughts or activities related to the trauma, reduced capacity to remember events related to the trauma, anhedonia, blunted affect, feelings of detachment or derealization, and a sense of a foreshortened future. Symptoms of increased arousal include exaggerated startle response, hypervigilance, insomnia, irritability, and outbursts of anger.

To be diagnosed with PTSD, a patient must exhibit at least one symptom of reexperiencing, three symptoms of avoidance, and two symptoms of increased arousal—and these symptoms must persist for more than 1 month. In addition, the diagnosis of PTSD requires that the patient’s disturbance cause “clinically significant distress of impairment in social, occupational, or other important areas of functioning.” The DSM-IV-TR criteria for a diagnosis of PTSD are shown in Figure 1.

Assessment of PTSD in Primary Care Settings

Returning veterans will often seek care from physicians or other clinicians who are not mental health professionals. Because these patients may be experiencing symptoms of PTSD, it is important that physicians be able to detect the disorder in the primary care setting. In many cases, the symptoms will not be apparent unless specifically sought, but primary care providers may have limited time to perform detailed queries. In response to this problem, the United States Department of Veteran Affairs’ National Center for PTSD has developed a four-question Primary Care PTSD Screen to enable physicians and other clinicians to detect PTSD in patients.
Patients with PTSD may seek consultation in a variety of ways. Although some patients will want to talk about their experiences, most patients will have difficulty discussing their thoughts and feelings about what happened to them. It is important not to press traumatized patients too soon or too intensely to talk about their experiences. Rather, patients should be allowed to discuss their traumatic experiences when they are ready to do so. The National Center for PTSD recommends that physicians begin the assessment process by concentrating on the immediate needs of the patient and by being prepared to explore the traumatic exposure later in the assessment process. Thus, assessment should start with stabilization and proceed in the following sequence:

1. Address symptoms that require emergency intervention, such as suicidal or homicidal thoughts or acute psychotic symptoms.
2. Address symptoms that are most disruptive to the patient, such as those that interfere with psychosocial functioning.
3. Develop a case formulation and a comprehensive treatment plan. Several psychosocial and pharmacologic interventions may be considered.

### Treatment Modalities and Psychosocial Interventions

Psychologic and social interventions may be the treatment of first choice for many patients with PTSD. In some cases, these interventions are more valuable than medications. In most cases, they should be an important part of the patient’s treatment. Establishing a trusting relationship between the patient and healthcare provider is always the first step in the initiation of any treatment, but developing such a relationship may be especially challenging with those patients who have experienced traumatic stress. Physicians should work from a patient-centered perspective to determine the current concerns of the patient. Practical help with specific issues can then be offered.

### Education for the Whole Patient: Psychoeducational Interventions

Unfortunately, patients may have misconceptions about mental illness and PTSD that can interfere with their ability to accept and adhere to effective treatment regimens. Patient education can help to remove many misconceptions and improve patients’ levels of self-understanding and symptom recognition, as well as reduce the level of fear and shame they may feel about their symptoms. Education empowers patients, providing them with knowledge about the causes of his or her symptoms, of what will happen in treatment, and of how recovery is expected to proceed. Patient education should

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**Checklist**

- **A.** The person has been exposed to a traumatic event in which both of the following were present:
  1. The person experienced, witnessed, or was confronted with an event(s) that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others.
  2. The person’s response involved intense fear, helplessness, or horror.

- **B.** The traumatic event is persistently reexperienced in one or more of the following ways:
  1. Recurrent and intrusive distressing recollections of the event, including images, thoughts, or perceptions.
  2. Recurrent distressing dreams of the event.
  3. Acting or feeling as if the event were recurring.
  4. Intense psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event.
  5. Physiological reactivity on exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event.

- **C.** Persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness as indicated by three or more of the following behaviors:
  1. Efforts to avoid thoughts, feelings, or conversations associated with the trauma.
  2. Efforts to avoid activities, places, or people that arouse recollections of the trauma.
  3. Inability to recall an important aspect of the trauma.
  4. Markedly diminished interest or participation in significant activities.
  5. Feelings of detachment or estrangement from others.
  6. Restricted range of affect.
  7. Sense of a foreshortened future.

- **D.** Persistent symptoms of increased arousal, as indicated by two or more of the following:
  1. Difficulty falling or staying asleep.
  2. Irritability or outbursts of anger.
  3. Difficulty concentrating.
  4. Hypervigilance.
  5. Exaggerated startle response.

- **E.** Duration of the symptoms is more than 1 month.

- **F.** The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

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(Figure 2). Endorsement of any two items on the screen is associated with a likelihood of a diagnosis of PTSD and indicates the need for additional patient assessment.
Have had nightmares about it or thought about it when you were constantly on guard, watchful, or easily startled?

Felt numb or detached from others, activities, or your surroundings?

Finally, cognitive restructuring may help veterans deal with changed perceptions of personal identity caused by participation in combat.

Exposure therapy may be considered after patients are prepared to confront their trauma-related emotions and painful memories. This form of therapy is based on repeated verbalization of traumatic memories by patients. Patients are repeatedly exposed to their own individualized fear stimuli until their fear responses are consistently diminished. It is important that physicians providing this form of treatment have proper training and experience, however, because it has been found that a patient’s condition may deteriorate if this type of therapy is used improperly.

**Psychopharmacologic Intervention**

The observation of physiologic alterations (eg, adrenergic hyperactivity), as well as psychologic alterations, associated with PTSD has led to the use of pharmacologic agents to treat patients with this disorder. Pharmacotherapy should not be considered the primary modality for managing PTSD; it is one option among other potential treatment courses previously discussed. The most effective intervention for PTSD may involve a combination of pharmacotherapy and psychotherapeutic modalities. Several medications have been used to treat patients with PTSD, some of them based on well-designed clinical trials and others apparently based solely on anecdotal evidence. Although, to date, only the antidepressants sertraline hydrochloride and paroxetine have been approved by the US Food and Drug Administration (FDA) for the treatment of patients with PTSD, clinical observation of psychophysiologic alterations associated with the disorder has led to the study of other antidepressants, mood-stabilizing agents, adrenergic-inhibiting agents, and antipsychotic agents.

- **Antidepressants**—The most frequently prescribed and most carefully studied pharmacologic agents used to treat patients with PTSD. A growing body of literature provides evidence to consider antidepressants the pharmacologic treatment of first choice for managing the disorder. Virtually every antidepressant available has been used in some context to attempt to manage the clinical symptoms of PTSD.

Selective Serotonin Reuptake Inhibitors: The medications in this class of antidepressants inhibit the reuptake of serotonin by neurons, resulting in increased amounts of serotonin in synapses and improved functioning of serotonin in the central nervous system. Serotonin has a regulatory effect on norepinephrine activity through the locus ceruleus, helping to modulate excessive external stimuli and reduce feelings of fear. Research and clinical practice have shown that selective serotonin reuptake inhibitors (SSRIs) are effective for managing anxiety, depression, and panic attacks.

There are several reasons that SSRIs are the current medications of choice for managing PTSD. They ameliorate all three PTSD symptom categories. They are effective in man-
aging the psychiatric disorders that often occur comorbidly with PTSD (eg, depression, panic disorder, social phobia). They may reduce such clinical symptoms as aggressive, impulsive, and suicidal behaviors that often complicate management of PTSD, and they cause relatively few adverse effects.13

Open-label and double-blind trials have demonstrated that the SSRIs citalopram hydrobromide, fluoxetine, fluvoxamine maleate, paroxetine, and sertraline are all effective in the treatment of patients with PTSD.13 In addition, paroxetine and sertraline have been assessed in large multisite double-blind controlled trials, and, as previously mentioned, the FDA has approved each of these medications for treatment of patients with major symptom clusters of PTSD.14

The adverse effects of paroxetine, sertraline, and other SSRIs are generally more tolerable for patients than those of other categories of antidepressants.12 Escitalopram oxalate, a relatively new SSRI, may also eventually prove beneficial for patients with PTSD but clinical experience using this drug to manage PTSD is limited at this time.15

Tricyclic Antidepressants: In addition to antidepressant effects, tricyclic antidepressants (TCAs) have antipanic effects.16-18 Because of the resemblance between panic attacks and severe PTSD arousal symptoms, TCAs may be helpful for managing PTSD. Small controlled clinical trials have been conducted using the TCAs amitriptyline hydrochloride, imipramine, and desipramine.16-18 Amitriptyline, compared with placebo, in 46 veterans with PTSD resulted in better outcomes on the Hamilton Depression, Hamilton Anxiety, Clinical Global Impression, and Impact of Event scales after 8 weeks of treatment.16 A study of 34 veterans with PTSD who were treated with imipramine, the monoamine oxidase inhibitor (MAOI) phenelzine, or placebo showed global assessment improvement in 75% of patients taking imipramine, 64% of patients taking phenelzine, or placebo showed global assessment improvement with imipramine, the monoamine oxidase inhibitor (MAOI)

Bupropion, duloxetine hydrochloride, mirtazapine, and venlafaxine hydrochloride are other antidepressants that are potentially useful for treating patients with PTSD.23 However, none of these medications have been tested in clinical trials for PTSD. Neither are they approved by the FDA for treatment of patients with PTSD.

Mood-Stabilizing Agents—The sensitization and kindling of the limbic system has been hypothetically proposed as a cause of physiologic changes in PTSD.24 In this model, repeated traumatic stress leads to sensitization and kindling, with a spontaneous limbic discharge resulting from sensitization.24 Mood-stabilizing agents (ie, medications commonly used as anticonvulsants) have the potential to prevent this sensitization and kindling or to modulate these phenomena after they occur. Therefore, they may ameliorate PTSD symptoms.

Moclobemide, a reversible inhibitor of monoamine oxidase type-A, is associated with less risk of hypertensive crisis and has been shown in clinical studies to reduce symptoms in all three PTSD symptom categories.20 However, moclobemide is not yet available in the United States.

Other Antidepressants: Several other antidepressants have been investigated for the treatment of patients with PTSD. For example, nefazodone and trazodone hydrochloride are potentially useful because they increase serotonin activity, though not selectively. In six open-label trials reported by Hidalgo et al,21 nefazodone was found to reduce anxiety, nightmares, and global ratings in patients with PTSD. In addition, it was found to possibly help reduce PTSD-related sleep disturbance.21 As of 2001, however, the FDA has required manufacturers and pharmacists to use a black box warning label on nefazodone because of potential risk for hepatotoxicity and liver failure.22 Trazodone has not been proven significantly effective in management of the core symptoms of PTSD.14 Furthermore, because it has a somewhat sedative effect, some clinicians prescribe it in low dosages to treat patients with insomnia.14

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tors in platelets due to increased circulation of norepinephrine. Sustained periods of increased norepinephrine levels are thought to increase the risk of PTSD by contributing to overconsolidation of memories of the traumatic event.

Medications that decrease adrenergic (ie, norepinephrine-mediated) activity may reduce anxious arousal in patients with PTSD. Propranolol hydrochloride and other β-adrenergic blockers reduce the peripheral effects of norepinephrine. Propranolol has been shown to improve PTSD symptoms in one small clinical trial, but it was not helpful in another small trial. Because α2-adrenergic receptor agonists (eg, clonidine, guanfacine hydrochloride) act at noradrenergic autoreceptors to inhibit the firing of cells in the locus ceruleus, they may also be responsible for reducing the release of norepinephrine in the brain. In small open-label clinical trials, clonidine showed promise in reducing symptoms among patients with PTSD. The use of prazosin hydrochloride, an α1-adrenergic receptor antagonist, resulted in robust improvement of several PTSD symptoms, particularly sleep quality and reduction of nightmares, in a double-blind crossover protocol by Raskind et al.

**Antianxiety Agents**—Benzodiazepines and buspirone hydrochloride are among the medications that are not currently recommended for treating patients with PTSD.

**Benzodiazepines**: Frequently prescribed to reduce anxiety and promote sleep in patients. However, their efficacy in managing the specific symptoms of PTSD has not been established. In fact, they may worsen the disorder by virtue of their dissociative and disinhibitory properties. In addition, their potential for abuse through addiction remains a major area of concern. Therefore, benzodiazepines cannot be recommended for patients with PTSD.

**Buspirone**: A nonaddictive medication widely used to treat patients with anxiety. However, like benzodiazepines, the effectiveness of buspirone for managing the core symptoms of PTSD remains to be established.

**Antipsychotic Medications**—Although psychotic symptoms are not included in the diagnostic criteria for PTSD, some patients with PTSD may experience brief psychotic episodes and also have psychotic symptoms as part of a comorbid disorder. Use of older, “conventional” antipsychotic medications (eg, haloperidol) is not recommended because of the risk of adverse effects and the availability of more suitable alternatives. Preliminary results suggest that the newer, atypical antipsychotic drugs (eg, olanzapine, quetiapine fumarate, risperidone) may be useful for patients with PTSD and psychotic symptoms to augment treatments with first- or second-line medications. Such patients include those experiencing agitation, dissociation, hypervigilance, intense paranoia, or brief psychotic reactions associated with PTSD. Atypical antipsychotic medications may cause serious adverse effects, including tardive dyskinesia and neuroleptic malignant syndrome, though these effects are less likely than with conventional antipsychotic medications. Most atypical antipsychotic drugs may also cause weight gain.

The goal of the pharmaceutical management of PTSD is symptom reduction and stabilization. Even if all symptoms do not completely resolve, patients may still benefit from medications by getting a good night’s sleep and being less anxious and irritable. Figure 3 summarizes some of the medications that have proven effective or that are potentially effective for the clinical management of PTSD. Acute PTSD responds better to pharmaceutical management than does chronic PTSD, and, generally, the earlier treatment begins, the better.

Pharmacotherapy should be initiated with SSRIs in view of the extensive data available to document their effectiveness for PTSD and their relatively few adverse effects. If patients cannot tolerate SSRIs, or if they show no improvement in symptoms with SSRI treatment, second-line medications should be considered. Augmentation should be considered for patients who exhibit a partial response to SSRIs. Patients with excessive hyperactivity or feelings of arousal or dissociation might be helped by use of an adrenergic inhibitor. Patients with aggressiveness, impulsiveness, or lability as prominent symptoms of PTSD might benefit from treatment with a mood-stabilizing anticonvulsant. Patients exhibiting hypervigilance, paranoia, or psychotic behaviors might benefit from atypical antipsychotic medications.

In all cases, physicians need to be aware of potential adverse effects associated with the medications prescribed. Appropriate patient monitoring is also essential. Pharmacotherapy should be used in combination with psychosocial treatment modalities as well as other treatment options to ensure a comprehensive approach to patient care.

**Osteopathic Manipulative Treatment and PTSD**

To date, there have been no studies investigating the effectiveness of osteopathic manipulative treatment (OMT) in patients with PTSD. Nevertheless, it seems logical that OMT could benefit these patients. One might hypothesize that patients with posttraumatic stress are likely to have increased sympathetic nervous system activity and associated somatic dysfunction, particularly in the thoracolumbar region. Uncomfortable paravertebral muscle spasm may accompany these dysfunctions. Thus, in my view, addressing these dysfunctions with appropriate osteopathic manipulative techniques could aid in the healing process—as well as help improve patient-physician rapport and patient compliance with supplemental therapeutic modalities.

**Other War-Related Mental Disorders**

Posttraumatic stress disorder is the primary war-related mental disorder seen in veterans who returned from the 1991 Persian Gulf War. However, other mental disorders may occur in the context of combat and should be given appropriate consideration. With PTSD, comorbidity is the rule, not the excep-
Medications For Managing Posttraumatic Stress Disorder

<table>
<thead>
<tr>
<th>Class and Drug</th>
<th>Adult Dosage (mg/d)</th>
<th>Adverse Effects and Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antidepressants</td>
<td></td>
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<tr>
<td>□ SSRIs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>– Citalopram hydrobromide</td>
<td>20-60</td>
<td>Nausea, drowsiness, dry mouth, sexual dysfunction</td>
</tr>
<tr>
<td>– Paroxetine*</td>
<td>20-60</td>
<td>Nausea, drowsiness, dry mouth, sexual dysfunction</td>
</tr>
<tr>
<td>– Sertraline hydrochloride*</td>
<td>50-200</td>
<td>Nausea, insomnia, loose stools, sexual dysfunction</td>
</tr>
<tr>
<td>□ TCAs</td>
<td></td>
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</tr>
<tr>
<td>– Amitriptyline hydrochloride</td>
<td>50-300</td>
<td>Drowsiness, weakness, cardiac conduction disturbances</td>
</tr>
<tr>
<td>Mood-stabilizing Agents (Anticonvulsants)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Carbamazepine</td>
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<td>Nausea, sedation – risk of anemia and agranulocytosis</td>
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<tr>
<td>□ Gabapentin</td>
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<td>Sedation, ataxia, headache – risk of serious skin rash</td>
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<tr>
<td>□ Valproate sodium</td>
<td>250-2000</td>
<td>Nausea, weight gain – risk of hepatic failure and pancreatitis</td>
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<td>Adrenergic Inhibitors</td>
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<td>□ Clonidine</td>
<td>0.2-0.6</td>
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<tr>
<td>□ Prazosin hydrochloride</td>
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<td>Dizziness, headache, sedation – risk of syncope</td>
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<td>Antianxiety Agents</td>
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<tr>
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<tr>
<td>□ Clonazepam*</td>
<td>0.5-4</td>
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<tr>
<td>Atypical Antipsychotic Medications</td>
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<td></td>
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<tr>
<td>□ Olanzapine</td>
<td>5-20</td>
<td>Extrapyramidal symptoms, sedation, weight gain – risk of diabetes mellitus</td>
</tr>
<tr>
<td>□ Quetiapine fumarate</td>
<td>25-300</td>
<td>Sedation, dizziness, postural hypotension – risk of cataracts</td>
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<tr>
<td>□ Risperidone</td>
<td>0.5-8</td>
<td>Extrapyramidal symptoms, agitation, anxiety, insomnia, rhinitis</td>
</tr>
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</table>

Figure 3. Medications with proven or potential effectiveness in the management of posttraumatic stress disorder (PTSD). The effectiveness of selective serotonin reuptake inhibitors (SSRIs) has been proven in large clinical trials. Tricyclic antidepressants (TCAs) have produced moderate improvement in symptoms in small controlled clinical trials. The effectiveness of mood stabilizers has been suggested in small open-label clinical trials. Adrenergic inhibitors have shown promise in small open-label or controlled trials. The effectiveness of antianxiety agents has not yet been established in clinical trials. Preliminary results indicate that atypical antipsychotic medications may be useful to augment treatment with other medications. *This medication is approved by the US Food and Drug Administration for the management of PTSD. †This medication is not recommended for treating patients with PTSD because of risk of dependency.

Prior to a conclusive diagnosis of PTSD, patients should receive a thorough psychiatric and medical examination to rule out other possible problems. As previously noted, a number of psychiatric disorders may occur in the postcombat setting, including anxiety and mood disorders, personality disorders, psychosis, and substance abuse. In addition, general medical conditions—including anemia, arthritis, asthma, back pain, diabetes, kidney disease, lung disease, and ulcers—are common among patients with PTSD. In many cases, the comorbid conditions likely prompt initial requests for treatment, especially in the primary care setting. These complaints should be properly assessed and never assumed to be exclusively psychogenic in origin.

A number of mental disorders, including depression, mania, panic disorder, and schizophrenia, commonly have an age of onset between the late teens and early 30s—the same
age range of many individuals engaged in the nation’s current military conflicts.2,5-8 In a person who is susceptible to a particular disorder, that disorder could be precipitated by the stresses of combat situations. In addition, mental disorders already present, but in latent or controlled states, could worsen as a result of the impact of such trauma.2,5-8 Thus, it is important for primary care physicians to consider the full range of possible psychiatric disorders before making a diagnosis.

The comorbidity of PTSD and substance abuse is high, so it is important to regularly assess these patients for substance abuse and related disorders.2,5-8 Substance abuse may begin or worsen for soldiers in the Middle East combat theater. Opium poppies and marijuana remain the two largest cash crops in Afghanistan. Further, clinicians in Iraq report that alcohol is easily accessible and black-market diazepam is inexpensive and readily available.38

**Ongoing Support for Patients With PTSD**

Combat veterans with PTSD may present a unique challenge to primary care physicians, with psychiatric consultation usually being necessary. Referral to a Veterans Affairs (VA) medical center may be an early consideration for many patients. The US Department of Veterans Affairs has many physicians with treatment expertise in PTSD, and virtually all veterans returning from the current conflicts will be eligible for VA treatment. Because PTSD interferes with social functioning, it is important to encourage these patients to avoid social isolation and withdrawal. Veterans often report that the opportunity to connect with and be supported by other veterans is a valued experience.39 Such an experience may be difficult to accomplish outside a VA facility or other setting devoted to the needs of returning veterans.

A number of helpful online resources on PTSD are available for both physicians and veterans. A list of these resources is presented in Figure 4.

**Conclusions**

Primary care physicians who see patients that have returned to the United States after military service in Afghanistan and Iraq should consider the possibility that active-duty stressors have contributed to patient symptoms. With these events in mind, physicians should make respectful and gentle inquiries as to patient history so that appropriate treatment can be initiated and necessary referrals provided quickly.

The principles discussed in the current article are presented primarily in the context of combat-related PTSD. However, the same principles can apply to the treatment of all patients with PTSD—regardless of the nature of the trauma. Some examples of noncombat-related causes of PTSD include physical assault, exposure to natural disasters, and terrorist attacks. Patients who have experienced such trauma may benefit from the same types of interventions provided to military veterans with PTSD.

**References**


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