Recognizing and Treating Posttraumatic Stress Disorder: A Guide for the Primary Care Physician

Ruth E. Levine, MD
Shailesh Jain, MD, MPH

Posttraumatic stress disorder (PTSD) is a common psychiatric syndrome that is frequently unrecognized by primary care physicians. Following an emotional trauma, patients with PTSD experience a constellation of symptoms, including sympathetic nervous system activation, emotional numbing and withdrawal, and nonspecific hyperarousal. The lack of syndrome-specific symptoms and the fact that PTSD is typically comorbid with other psychiatric disorders can make recognition of the syndrome particularly difficult. Patients with PTSD tend to be very ill, with high levels of functional impairment as a result of both medical and psychiatric comorbidities. Primary care physicians would be prudent to routinely screen for emotional trauma so that their patients with PTSD can be identified and offered appropriate therapy.

This article provides a review of the epidemiology, diagnosis, and management of PTSD, as well as information on its historical context, clinical course, risk factors, and comorbidities. The diagnostic criteria for PTSD are described in detail.

HISTORICAL CONTEXT

From at least the middle of the nineteenth century, PTSD has been observed as a sequela of war.[1] American Civil War soldiers who experienced psychiatric symptoms following combat were described as having "soldier's heart"[2] or "irritable heart."[3] Soldiers with similar symptoms during World War I were labeled as having "shell shock"[1,4] or "the effort syndrome,"[5] whereas World War II soldiers displaying such symptoms were described a having a "combat stress reaction."[5] The term PTSD was first used during the Vietnam War.

Because of its association with war veterans, most primary care physicians most likely do not consider PTSD to be a diagnosis relevant to their practices. Yet, PTSD has been established as one of the most common psychiatric disorders, affecting nearly 8% of the civilian population.[6] In recent years, there has been an acceleration of research addressing the identification and treatment of PTSD. In light of the events of September 11, 2001, the need to appreciate the impact of emotional trauma on civilians is even more obvious.

CRITERIA

The diagnostic criteria for PTSD are listed in **Table 1**. They include experiencing a traumatic event, reexperiencing symptoms associated with the trauma, exhibiting avoidance of/withdrawal from traumatic stimuli, and being in a state of nonspecific hyperarousal.

Trauma

It was previously thought that to precipitate PTSD, a traumatic event had to be sufficiently severe and unusual to be outside the range of typical human experience.[7] With the recognition that trauma is far more common than was formerly believed, however, the

Dr. Levine is the Director of Medical Student Education and an Associate Professor of Psychiatry and Behavioral Sciences and of Internal Medicine; and Dr. Jain is a Fourth-Year Resident, University of Texas Medical Branch, Galveston, TX.

Table 1. Diagnostic Criteria for Posttraumatic Stress Disorder

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 or events 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.
   Note: In children, this may be expressed instead by disorganized or agitated behavior.

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.
   Note: In young children, repetitive play may occur in which themes or aspects of the trauma are expressed.
   (2) Recurrent distressing dreams of the event.
   Note: In children, there may be frightening dreams without recognizable content.
   (3) Acting or feeling as if the traumatic event were recurring (includes a sense of reliving the experience, illusions, hallucinations, and dissociative flashback episodes, including those that occur on awakening or when intoxicated).
   Note: In young children, trauma-specific reenactment may occur.
   (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 (not present before the trauma), as indicated by 3 (or more) of the following:
   (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) Feeling of detachment or estrangement from others
   (6) Restricted range of affect (eg, unable to have loving feelings)
   (7) Sense of foreshortened future (eg, does not expect to have a career, marriage, children, or a normal life span)

D. Persistent symptoms of increased arousal (not present before the trauma), as indicated by 2 (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 disturbance (symptoms in criteria B, C, and D) is more than 1 month.

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

Specify if:

Acute: if duration of symptoms is less than 3 months

Chronic: if duration of symptoms is 3 months or more

Specify if:

With delayed onset: if onset of symptoms is at least 6 months after the stressor

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American Psychiatric Association removed that requirement from its list of diagnostic criteria for PTSD in the fourth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (*DSM-IV*).[8] The types of traumatic events that can lead to PTSD are actually quite numerous. Two studies have documented that 60% to 73.6% of men and 51% to 64.8% of women in the general population report at least one traumatic event in their lifetimes.[6,9] Traumas most often reported include witnessing death or injury, being in or witnessing an accident, being in a natural disaster (eg, a fire), and experiencing a threat to life when a victim of a crime.[1]

Among trauma survivors, only 10% to 20% eventually develop PTSD. The development of symptoms is proportional to the intensity of and physical proximity to the trauma.[10] However, a person does not have to experience a trauma directly to develop PTSD; many persons with the syndrome may have only witnessed or heard about a trauma. The key requirement for development of PTSD is the experience of feelings of intense fear, helplessness, or horror as a result of exposure to a traumatic event. A trauma, whether experienced directly, witnessed, or heard about, must evoke these powerful feelings in order to result in the syndrome of PTSD.

Reexperiencing Phenomena

After a person's exposure to trauma, various symptoms can subsequently develop, including reexperiencing aspects of the trauma. Reexperiencing phenomena, otherwise known as flashbacks, are recurrent recollections of the traumatic event during which intrusive and distressful memories occur. During these flashbacks, a trauma survivor can have all of the symptoms first experienced during the traumatic event. Intense autonomic reactivity, including palpitations, sweating, shaking, and stomach upset, frequently occur. Patients may revisualize the trauma or reexperience the smells or tastes associated with the event. Also included in reexperiencing phenomena are vivid, recurrent nightmares. The nightmares associated with PTSD tend to be "movie-like," with the victim seeing the same event played over and over again.

Reexperiencing phenomena typically occur with reminders of the trauma or even during periods of nonspecific stress. Patients develop a "hair-trigger" response, so that dramatic panic reactions can be evoked in situations in which intense responses would not ordinarily occur.

Avoidance/Numbing

Because of the extreme discomfort induced by any reminder (or "trigger) of the traumatic event, trauma victims generally take great pains to avoid stimuli associated with traumatic memories. Because even nonspecific stimuli can evoke autonomic reactivity, trauma victims will withdraw from previous activities, situations, or relationships they once enjoyed. A phenomenon described as psychic numbing or emotional anesthesia takes place. Trauma victims retreat into a psychologically protective shell to shield themselves from feeling much of anything. In extreme cases, this strategy may mean withdrawing from friends and loved ones, thus preventing the experience of intimacy, tenderness, and sexuality. A particularly notable, although unusual, symptom involves what has been described as a sense of a foreshortened future[10]; some trauma victims, when asked what they see themselves doing in 10 or 20 years, may reply that they do not see themselves living to be that old.

These symptoms of avoidance, withdrawal, and emotional numbing can mimic the symptoms of major depression. Many patients describe themselves as feeling numb and different from other people. Consequently, they have great difficulty socializing with others or experiencing joy.

Hyperarousal

The final criterion involves a nonspecific and global increase in arousal. Symptoms include an exaggerated startle response, difficulty sleeping, irritability, and problems concentrating. Patients have difficulty modulating feelings of anger and often experience rage reactions. In the worst cases, patients with PTSD seesaw between feelings of irritability and agitation, alternating with feelings of numbness and the desire to withdraw emotionally.

EPIDEMIOLOGY

Although PTSD has typically been associated with male veterans of war, there is a higher rate of lifetime PTSD in women. Kessler and colleagues reported lifetime prevalence among men to be 5%, compared with 10.4% among women,[6] and Resnick and colleagues reported a rate of 12% among women.[11] According to Kessler and colleagues, the traumas most commonly associated with symptoms of PTSD in men are combat-related exposures, whereas women are more likely to develop symptoms following rape or sexual molestation.[6] Other traumas with high likelihood of causing PTSD symptoms are childhood neglect and abuse, physical attack, and threat with a weapon.[6]

The cost of PTSD symptoms, in terms of personal productivity and well-being, can be overwhelming; patients with PTSD are among the most impaired of all patients with anxiety disorders.[12] An analysis of the economic burden of anxiety disorders in the United States

noted that persons with PTSD have one of the highest rates of service utilization of both psychiatric and nonpsychiatric physicians and also have significantly elevated rates of adverse work outcomes.[13] Even patients with only a single PTSD symptom are more likely to experience poor social support, marital difficulties, high numbers of chronic illnesses, and occupational problems than are persons without mental disorders.[14]

CLINICAL COURSE

The course of PTSD is quite variable. Some individuals develop symptoms immediately following the trauma. In the first month after a traumatic event, the diagnosis applied is acute stress disorder (ASD). The symptoms of ASD are similar to those of PTSD, although somewhat milder. Moreover, with ASD there is a greater emphasis on the symptom of dissociation.[10] After a month, the diagnosis becomes PTSD. However, some trauma survivors may not develop symptoms of PTSD for months or even years after exposure to a trauma. Sometimes, a stressful life event, such as an accident or divorce, might precipitate symptoms of PTSD that are associated with a trauma from the past. This phenomenon is described as late-onset PTSD.

Once someone develops PTSD, it can become a lifetime illness. Approximately 75% of persons diagnosed with PTSD will continue to meet diagnostic criteria 6 months later.[15] In a study by Kessler and colleagues, the median duration of PTSD for the worst types of trauma was 3 years for those who obtained treatment and 5 years for those who were not treated.[6] Many persons with PTSD experience multiple traumas over the course of their lives. For them, the symptoms of PTSD can continue for decades.[14]

RISK FACTORS

In recent years, investigators have attempted to determine why only 10% to 20% of trauma survivors develop PTSD and so have focused on risk factors for the disorder. There are a several risk factors associated with PTSD, the most prominent and obvious of which is exposure to trauma. Other risk factors include female gender, poor social support, a family history of major depression, and a preexisting personal history of trauma, anxiety, depression, and substance abuse.[1,16] The type and intensity of the trauma can also be a risk factor; the greater the severity of the trauma and the longer the trauma persists, the greater the likelihood of developing PTSD. For example, childhood survivors of prolonged abuse are far more likely to develop PTSD than are persons who experienced a single traumatic event.

Preexisting psychopathology is another well-documented risk factor. In a study of Oklahoma City bombing survivors, 45% of those with preexisting psychiatric disorders developed PTSD, compared with only 26% of those without preexisting pathology.[17] Genetic constitutional vulnerability also appears to play a role. Persons who have a decreased response of cortisol secretion after a traumatic event seem to be at increased risk for developing PTSD. This decreased cortisol responsiveness has been observed in families and may prove to be a genetic marker for increased risk.[18]

COMORBIDITIES

A primary challenge of treating patients with PTSD is that most of these patients have comorbid psychiatric conditions. Several studies have reported rates of psychiatric comorbidity of 73% to 83%.[19–21] The most common comorbid conditions are major depression, substance abuse (particularly alcohol), and other anxiety disorders.[6] Whereas persons with preexisting psychopathology are more likely to develop PTSD, those who have PTSD are also more likely to develop subsequent anxiety, depression, and substance use disorders.[16,19] Depression rates are particularly high. Compared to the general population, there is a 6-fold increased risk for major depression, a 3-fold increased risk for alcoholism or substance abuse, and a 4-fold increased risk for panic disorder or agoraphobia in patients with PTSD; the rate of suicide attempts among patients with PTSD is 20%.[6,19,22]

The rate of somatization disorder is also significantly higher in persons with PTSD compared to the general population, a finding that is particularly relevant in the primary care setting.[22] Trauma survivors may have somatic symptoms symbolically representative of their traumas. For example, survivors of sexual abuse frequently present with abdominal pain or sexual dysfunction. Persons with PTSD are also more likely to have general medical conditions than are persons in the general population. In a study comparing PTSD patients with matched controls, those with PTSD were found to have higher rates of bronchial asthma, peptic ulcer disease, and hypertension.[22] Another controlled study of war veterans with PTSD reported significantly elevated rates of circulatory, digestive, musculoskeletal, endocrine, nervous system, respiratory, and infectious disorders.[23]

Recognition of the possibility of comorbidity in patients with PTSD is essential. Physicians focusing on the many comorbid problems of their patients may have difficulty recognizing PTSD.

Table 2. A Clinician's Guide to Treating Victims of Trauma

Explain to trauma survivors that it is normal to experience a variety of symptoms, including anxiety, depression, irritability, nightmares, and possibly even flashbacks.
Encourage trauma survivors to talk about the traumatic experience with people they trust, including family and friends.
Caution trauma survivors to avoid excessive use of alcohol, nicotine, and drugs as coping mechanisms to deal with distress.
Provide trauma survivors with psychosocial support, especially in the first 2 weeks following the trauma.
Evaluate trauma survivors frequently for the need for specialized intervention; 1 or 2 sessions of counseling may be useful.
For trauma survivors who have difficulty sleeping, prescribe a nonbenzodiazepine sedative hypnotic agent, if appropriate.
For trauma survivors who remain distressed, noncommunicative, or unable to function 2 to 3 weeks after the trauma, arrange a consultation with a mental health professional.

Data from Ballenger et al.[16]

DIAGNOSIS

Because the symptoms of PTSD are so nonspecific, it can be quite challenging for primary care physicians to identify the syndrome unless they are aware of a history of trauma. Most busy primary care physicians do not have time to personally conduct extensive screening; however, there are some useful patient-administered instruments that can be given to patients in the waiting room. The patient self-report form that accompanies the Primary Care Evaluation of Mental Disorders questionnaire has a screening component, which surveys for both anxiety and depression and includes a question about trauma.[24] The Anxiety Disorders Association of America also has many useful patient-administered screens on its Web site (http://www.adaa.org), including a questionnaire specifically about PTSD, which is derived from *DSM-IV* criteria. Because patients tend not to volunteer a history of trauma, it is also helpful to include relevant screening questions when obtaining the medical history (eg, "Have you ever had an experience that was extremely upsetting to you, one in which you experienced intense feelings of fear, helplessness, or horror?").

Asking about major accidents, injuries, or personal assaults may also be appropriate. For women, in particular, it is essential to inquire about a history of sexual trauma. Because many women might not recognize a situation as abuse, it is useful to inquire if they ever had a sexual experience they did not want. If a patient admits to a traumatic experience, it is useful to ask next about any reexperiencing phenomena. Some appropriate questions include the following: (1) "Do you have difficulty forgetting about the trauma?" (2) "Have you had nightmares in which you felt you were reliving the experience?" and (3) "Do you ever experience the same feelings you had when you were back in the traumatic situation?" To screen for avoidance, some of the following questions can be asked: (1) "Do you go out of your way to avoid memories of the traumatic experience?" (2) "Do you have trouble relating to others?" and (3) "How do you feel about your future?" Hyperarousal can be detected with questions about sleep, concentration, irritability, and difficulty controlling anger.

TREATMENT

Initial Treatment of Victims of Trauma

It is particularly important to help trauma victims even before the onset of PTSD symptoms occurs. The International Consensus Group on Depression and Anxiety[16] recommends that physicians take the steps outlined in **Table 2** when treating patients exposed to trauma. **Figure 1** provides a flow chart for primary care management of PTSD.

In the immediate aftermath of trauma, it has been a common practice in recent years to "debrief" survivors in an attempt to decrease the incidence of PTSD. Debriefing is a psychological treatment that encourages survivors to express their feelings through discussion of the traumatic event. However, a recent review of this process concluded that it may not have significant efficacy in preventing the onset of PTSD.[25]

Once physicians recognize PTSD, various interventions can be attempted. Patients should be educated about the diagnosis of PTSD via books, pamphlets, Web sites, or referral to support groups. Educational materials can be obtained from the National Institute of Mental Health, the National Alliance for the Mentally Ill, or the Anxiety Disorders Association of America.

Psychological Treatments

Psychotherapy is a mainstay of treatment of patients with PTSD, either by itself or in combination with drug therapy. In general, components found to be most essential for good therapy outcome rates include patient perception of the therapy as credible, high motivation, and regular attendance. Another factor cited as being important is the patient's relationship with the therapist.

There are several goals common to psychotherapies for patients with PTSD. Patients are guided to enter

into situations, either directly or through imagined exposure, that require them to confront and experience their symptoms. The goal is for patients to become desensitized to the impact of triggers and learn strategies to tolerate and modulate their autonomic arousal. This approach is the primary strategy in so-called exposure therapies. Moreover, because patients are typically highly avoidant, they also are encouraged to increase social interactions.

Most outcome studies have examined cognitive behavioral therapy (CBT) programs that consist of variants of exposure therapy, cognitive therapy, and anxiety management.[26] A recent meta-analysis of 17 controlled clinical trials of psychotherapy reported a significant reduction of symptoms of PTSD[27]; the largely cognitive behavioral therapies evaluated were effective in decreasing all of the major symptoms of PTSD, including intrusive thoughts and memories, avoidance, and hyperarousal.

Several other types of therapies deserve mention. Eye movement desensitization and reprocessing (EMDR) has received considerable attention as a novel therapy that utilizes the production of saccadic eye movements in combination with exposure therapy to reduce the symptoms of PTSD. However, a recent meta-analysis comparing EMDR with other exposure therapies concluded that it is not more effective than other exposure techniques and that the eye movements, which are integral to the therapy, are probably unnecessary.[28] Imagery rehearsal therapy is a relatively brief technique designed to reduce chronic nightmares, a frequent problem in patients with PTSD. In addition to reducing nightmares, this therapy is also helpful in improving sleep quality and decreasing overall symptom severity.[29]

For patients with complex or difficult-to-treat PTSD, long-term supportive psychotherapy may be indicated. Patients also may benefit from therapies targeting a subset of symptoms, such as anger management or social skills training. When referring patients for psychotherapy, primary care physicians should seek therapists with expertise in cognitive behavioral or exposure therapies. Experienced therapists can be located through the American Psychological Association; the Anxiety Disorder Association of America also has a referral service that can be used.

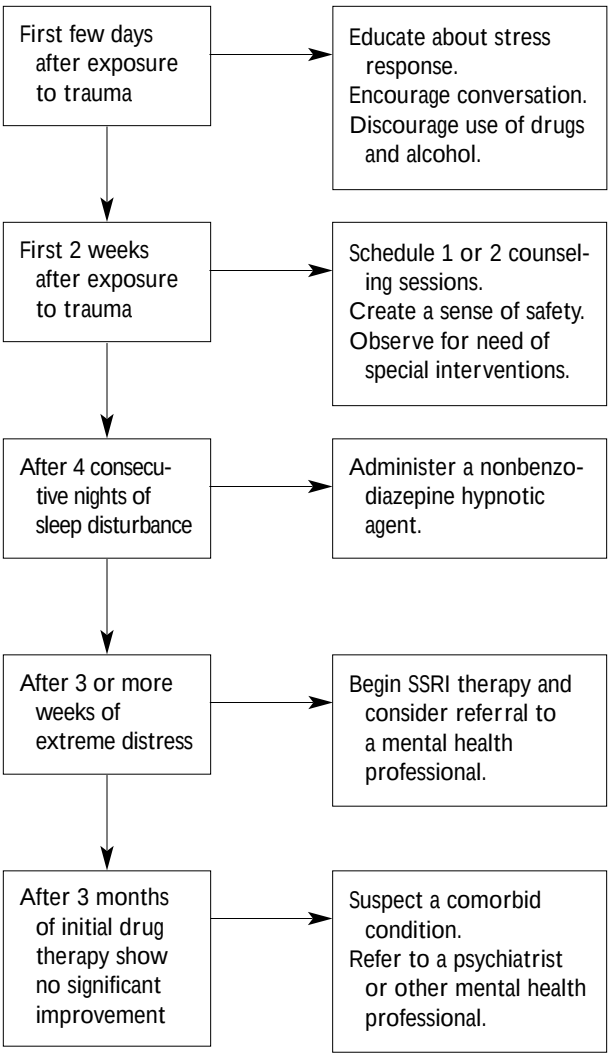

Figure 1. Flow chart with suggested primary care management of patients with posttraumatic stress disorder. (Data from Ballenger et al.[16])

Pharmacotherapy

Selective serotonin reuptake inhibitors. The selective serotonin reuptake inhibitors (SSRIs) have become first-line therapy for depression because of their significant advantages in terms of safety and tolerability over previously used agents. In recent years, considerable data has been published on the use of SSRIs to treat PTSD.

Two clinical trials with fluoxetine reported that, overall, persons with PTSD not associated with combat experiences responded significantly better to fluoxetine than to placebo, particularly in the areas of hyperarousal and numbing. Combat veterans also responded to fluoxetine but less well and, in some cases, no better than to placebo.[30,31]

There have been several open-label[32,33] and placebo-controlled trials[34,35] of sertraline as treatment of PTSD. Subjects showed significant improvement, particularly in the areas of avoidance/numbing and hyperarousal.

Continued use of sertraline in patients with PTSD has been reported to substantially decrease the likelihood of relapse.[36,37]

Most recently, a placebo-controlled trial with paroxetine reported significant improvement in all 3 PTSD symptom clusters: re-experiencing phenomena, avoidance/numbing, and hyperarousal.[38] However, in an open-label trial of the drug, it was reported that patients with childhood trauma exposure were more resistant to treatment.[39] Fluvoxamine has been investigated in 2 open-label studies,[40,41] both of which reported improvement in symptoms.

Overall, the evidence suggests that SSRIs are the best first-line treatment of PTSD, based on their efficacy, safety, and tolerability. Civilian populations—particularly women—may derive the most benefit from SSRI treatment.

Nefazodone. Nefazodone, a serotonergic antagonist and reuptake inhibitor, is frequently used as an alternative to SSRIs, particularly when there is a clinical concern about adverse effects of SSRIs (eg, sleep disruption, sexual dysfunction). There have been 7 open-label trials of nefazodone for the treatment of PTSD.[42,43] The drug was reported to be effective, particularly in younger, female, and civilian patients[42] but also in combat veterans.[43] Recently, however, nefazodone received a "black box" warning because of a slight risk for serious hepatic toxicity. This risk must be considered whenever initiating treatment with nefazodone.

Tricyclic antidepressant agents and monoamine oxidase inhibitors. Among tricyclic antidepressant agents, the drugs amitriptyline[44] and imipramine[45] have shown modest efficacy in treating PTSD; the noradrenergic tricyclic antidepressant agent desipramine was ineffective, compared with placebo.[46] The monoamine oxidase inhibitors phenelzine and brofaromine had mixed results in trials assessing their efficacy in cases of PTSD.[47,48] Because medications may take 8 weeks or longer to have an effect, patients most likely to respond are those with lesser traumas who have had symptoms for shorter periods of time. Negative prognostic indicators for amitriptyline include high intensity of trauma, severe depression, anxious mood, impaired concentration, somatic symptoms, feelings of guilt, and the presence of 4 or more avoidance symptoms.[49]

Although tricyclic antidepressant agents and monoamine oxidase inhibitors are effective and economic, serious problems with safety and tolerability limit their use and thus make them second-line therapy. Monoamine oxidase inhibitors, in particular, are dangerous medications; patients requiring treatment with these agents should be referred to a psychiatrist.

Benzodiazepines. Although benzodiazepines are indicated for general anxiety, they can be quite problematic for patients with PTSD, who are already prone to substance abuse. In some cases, this class of drugs might even make patients worse. In a double-blind, placebo-controlled trial of treatment in resistant patients, alprolazam was only slightly more efficacious than was placebo.[50] In another study, following acute treatment with alprolazam, 35% of patients taken off the drug experienced symptoms of anxiety, sleep disruption, rage reactions, hyperalertness, nightmares, and intrusive thoughts, and 8% developed prominent rage and homicidal ideations.[51] Benzodiazepines might even worsen some symptoms common in patients with PTSD, such as dissociation and disinhibition. For these reasons, benzodiazepines should be reserved as an adjunct treatment and should never be used as first-line therapy.

Anticonvulsant agents. Some investigators have explored the use of anticonvulsant agents to treat PTSD, based on neurobiologic hypotheses that PTSD involves a "kindling" phenomenon. According to this theory, limbic nuclei become sensitized by trauma, resulting in an excessive response to lesser stressors.[52] There have been a number of open-label trials of anticonvulsant agents, including carbamazapine[53] and valproic acid,[54,55] that have had promising results. The only placebo-controlled trial was a small preliminary study with lamotrigine.[56] Because of difficulties with safety and tolerability, however, anticonvulsant agents should not be used as first-line treatment for PTSD.

Other agents. Based on the hypothesis that patients with PTSD have significant autonomic arousal and thus might benefit from sympathetic nervous system blockade, open-label trials have been conducted using propranolol,[57] clonidine,[58] and prazosin.[59,60] Although benefit was demonstrated in these trials, placebo-controlled studies are lacking. Buspirone, a nonbenzodiazepine anxiolytic agent, has also shown promise in preliminary open-label trials.[61,62] Use of these agents in patients with PTSD, however, should be reserved for augmenting the effects of antidepressant agents rather than as initial therapy.

Neuroleptic drugs have also been a popular adjunctive treatment for PTSD, despite a lack of evidence of their efficacy in controlled trials. In fact, a review of combat veterans with PTSD showed no substantial improvement associated with neuroleptic treatment.[63] Furthermore, a recent small controlled trial evaluating the use of olanzapine in patients with PTSD showed no advantage over placebo.[64] Nevertheless, psychotic symptoms are fairly common among patients with PTSD

who otherwise do not meet criteria for a psychotic disorder.[65] Patients with symptoms of disorganizing hyperarousal, paranoid ideation, or aggressive impulsivity might benefit from augmentative therapy with low dosages of neuroleptic agents. The newer "novel antipsychotic" agents are preferable for this purpose because of their lower rates of extrapyramidal effects.

CONCLUSION

PTSD, once regarded solely as a sequela of war, is now recognized as a major public health problem. PTSD is common and is associated with high levels of comorbidity and impairment. Although there has been an acceleration of research in recent years about the management of this disorder, there are many unanswered questions. Both medications and psychotherapy are effective but not necessarily curative interventions. The varying response rates to pharmacotherapy in combat veterans versus civilians is still puzzling. Moreover, the optimum length of time a patient should remain on medication has not been determined, although recent studies suggest that keeping patients on antidepressant agents for up to 28 months after initiation of treatment can have beneficial effects.[37]

There is no controversy, however, about the necessity of identifying PTSD. Most persons in the United States are exposed to trauma at some point in their lives, and a significant percentage of them will go on to develop PTSD. Physicians must appreciate that emotional trauma can cause profound and lasting biologic changes, resulting in PTSD. This syndrome is not a normal response to trauma, and PTSD symptoms will not necessarily improve with time. PTSD is an abnormal and disabling illness. To treat patients optimally, physicians must screen for trauma on a regular basis and provide support and assistance to those patients known to have had a traumatic experience. **HP**

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