Consensus Statement on Posttraumatic Stress Disorder From the International Consensus Group on Depression and Anxiety

James C. Ballenger, M.D.; Jonathan R. T. Davidson, M.D.; Yves Lecrubier, M.D.; and David J. Nutt, D.M., M.R.C.P., F.R.C.Psych. (International Consensus Group on Depression and Anxiety); and Edna B. Foa, Ph.D.; Ronald C. Kessler, Ph.D.; Alexander C. McFarlane, M.D.; and Arieh Y. Shalev, M.D.

> Objective: To provide primary care clinicians with a better understanding of management issues in posttraumatic stress disorder (PTSD) and guide clinical practice with recommendations on the appropriate management strategy. Participants: The 4 members of the International Consensus Group on Depression and Anxiety were James C. Ballenger (chair), Jonathan R. T. Davidson, Yves Lecrubier, and David J. Nutt. Other faculty invited by the chair were Edna B. Foa, Ronald C. Kessler, Alexander C. McFarlane, and Arieh & Shalev. Evidence: The consensus statement is based on the 6 review articles that are published in this supplement and the scientific literature relevant to the issues reviewed in these articles. Consensus process: Group meetings were held over a 2-day period. On day 1, the group discussed the review articles and the chair identified key issues for further debate. On day 2, the group discussed these issues to arrive at a consensus view. After the group meetings, the consensus statement was drafted by the chair and approved by all attendees. Conclusion: PTSD is often a chronic and recurring condition associated with an increased risk of developing secondary comorbid disorders, such as depression. Selective serotofin reuptake inhibitors are generally the most appropriate choice of first-line medication for PTSD, and effective therapy should be continued for 12 months or longer. The most appropriate psychotherapy is exposure therapy, and it should be continued for 6 (J Clin Psychiatry 2000;61[suppl 5]:60–66) months, with follow-up therapy as needed.

P osttraumatic stress disorder (PTSD) is an important anxiety disorder because it is common, chronic, and disabling in many ways, impairing the functionality and physical health of sufferers and imposing an enormous burden on society. Recent assessment of the cost of anxiety disorders in the United States estimates the annual cost at \$63 billion in 1998 dollars,¹ with PTSD and panic disorder identified as the anxiety disorders with the highest rates of service use and work limitation.

PTSD is underrecognized in clinical practice, by primary care physicians and psychiatrists alike, but the need to disseminate information about PTSD extends beyond the medical profession to the community at large, employers, and the legal profession in particular. There is a unique interface between PTSD and the legal system, rooted in insurance claims and unfortunate skepticism about the concept of PTSD.² Despite extensive research, no test has emerged to confirm that an individual has the disorder. PTSD remains a clinical diagnosis.

By definition, PTSD differs from other anxiety disorders because its onset depends on exposure to a traumatic experience. The current behavior of sufferers is psychologically organized around, and dominated by, a traumatic experience. This may relate to a single event, as in an accident, or a series of related events, as in persistent sexual abuse. Extreme anxiety and recurrent "reexperiencing" of the trauma are stimulated by reminders of the event, and these flashbacks are one of the core features of PTSD. Sufferers often report that experiencing flashbacks is extremely distressing because any sense of control or choice of behavior is removed in the memory.

PTSD was the subject of the fourth meeting of the International Consensus Group on Depression and Anxiety. As in our earlier consensus meetings, our objective was to provide clinicians with a better understanding of the condition by identifying what is known in the field and what requires

Discussed at the meeting "Focus on Posttraumatic Stress Disorder," April 29–30, 1999, in Montecatini, Italy, held by the International Consensus Group on Depression and Anxiety. The Consensus Meeting was supported by an unrestricted educational grant from SmithKline Beecham Pharmaceuticals.

Reprint requests to: James C. Ballenger, M.D., Medical University of South Carolina, Department of Psychiatry and Behavioral Sciences, 171 Ashley Ave., Charleston, SC 29425-0742.

further research. This article represents our views and clinical recommendations on the management of PTSD, based on our assessment of the current clinical evidence.

CLINICAL PRESENTATION

The clinical syndrome of PTSD involves hyperarousal, flashbacks, and nightmares (reliving the traumatic experience), restricted range of emotions, and avoidance of reminders of the trauma. Many sufferers from PTSD, even those with quite severe impairment, fail to seek medical help for their symptoms; the most commonly reported reason is that they do not think they have a problem. Ambivalence and failure to seek help are not simply issues of information; they may often reflect reluctance to deal with the trauma or to address traumatic recollections.

As with any other anxiety disorder, the "pure" condition is unrepresentative of the population of sufferers, some 60% to 80% of whom experience secondary depression that complicates the recognition and diagnosis of the condition. In too many cases, the sufferer presents with secondary depression, and the underlying PTSD is undetected by the physician (at a primary or secondary care level), because they do not have it in mind when they see the patient. As a result, the patient's difficulties are only. partially recognized. Although some of the symptoms of PTSD resemble those of depression, a pattern of intrusive recollection of the traumatic event and pervasive avoidance should alert the clinician to the presence of PTSD, beyond depressive symptoms. Also, when depression is associated with PTSD, the symptoms tend to differ from those seen in major depressive disorder, with less psychomotor retardation or agitation.

PREVALENCE

PTSD is one of the most common anxiety disorders in the general population, with a lifetime prevalence on the order of 5% to 10%, almost half that of major depression. Prevalence rates vary across surveys according to differences in the population samples, assessment, and diagnostic criteria used to define the disorder, with lower lifetime rates reported in studies using DSM than ICD criteria. Although prevalence estimates are lacking in populations in the developing world, we can expect PTSD to be more prevalent in the many countries where there is increased and continued exposure to traumatic events such as interpersonal violence.

Partial PTSD, where individuals fail to meet one diagnostic criterion, typically avoidance, is an evolving concept, with a growing clinical literature. It may be highly prevalent, and it is certainly associated with significant disability.

As is common with many other psychiatric disorders, PTSD occurs more frequently in women than in men.

Table 1. Lifetime Prevalence of Trauma Exposure and the	
Risk of Posttraumatic Stress Disorder (PTSD) by Gender and	
Type of Trauma ^a	

	Lifetime Prevalence (%)		PTSD Risk (%)	
Trauma	Male	Female	Male	Female
Life-threatening accident	25.0 ^b	13.8	6.3	8.8
Natural disaster	18.9 ^b	15.2	3.7	5.4
Threatened with weapon	19.0 ^b	6.8	1.9 ^b	32.6
Physical attack	11.1 ^b	6.9	1.8 ^b	21.3
Rape	0.7 ^b	9.2	65.0	45.9
^a Data from Kessler et al. ³				

^bGender difference significant at the .05 level, 2-sided test.

Table 1 presents data on the lifetime prevalence of trauma exposure and risks of PTSD developing in women and in men after different traumatic experiences. The vulnerability to specific traumas differs for women and men. For example, assault and violence are more likely to produce PTSD in women than in men. As well as the nature of the specific trauma, factors common to all traumatic experiences—predictability, controllability, and intensity determine the severity of the trauma and the prevalence and severity of subsequent PTSD. For example, the risk of PTSD is increased in many developing countries where there is political or ethnic violence resulting in prolonged trauma exposure.

Most primary care physicians are likely to see subjects seeking medical help for acute trauma symptoms, such as sleep disturbance or persistent nightmares, after a motor vehicle accident. This is not a traumatic experience associated with a high probability of PTSD developing, but it is a trauma experienced by far more people than, for example, assault with a weapon or rape.

Research Need: Few studies have attempted to estimate the current prevalence of PTSD, and research is needed to estimate the point prevalence in the population based on current symptoms of PTSD induced by a traumatic experience.

BURDEN OF PTSD

PTSD and depression head the list of common mental disorders in terms of disability to the individual and financial burden to society. PTSD is more strongly associated with suicidal behavior than are other anxiety disorders, most notably panic disorder, which many clinicians perceive to be as important as depression in promoting suicidality. In fact, taking the most significant marker for extreme distress—suicide attempts—the rate of attempted suicide by persons who have PTSD has been reported at 19%,⁴ comparable with the rate reported among those who have depression.^{5.6}

The impact of mental disorders on the ability of individuals to function normally in their daily lives has been widely studied in populations with depression, and these studies have shown that depression is one of the most severely disabling of chronic medical conditions. Evidence now shows that PTSD compares with depression in the level of disability it imposes on individuals with the disorder. Work impairment, as measured by the number of work days lost and work cutback days in the previous month, is reported to be the same for PTSD as for major depression (2.8 days, National Comorbidity Survey⁷). More widely, there is evidence that PTSD prevents individuals from realizing their potential, either in educational attainment, marriage, or career development. For example, the person with PTSD may elect to stay in low-paying employment through fear of the stress associated with a more demanding job.

PTSD is the source of considerable costs to society. Reduced productivity (based on work days lost and work cutback days) translates to a financial loss of more than \$3 billion annually in the United States, a conservative figure in that it takes no account of the economic loss associated with the failure of those with PTSD to achieve their educational and career potential. Social impairment, seen in the failure to establish or maintain relationships with partners, marital breakdown, or adolescent pregnancies, imposes a further societal burden, and this burden is likely to be greater in countries with a history of violence and a developing social structure and economy.

Research Need: The relationship between trauma, poor health, and overutilization of the health system is well established: traumatized individuals make 4 times as many physician visits as nontraumatized ones. What requires further research is whether this relationship is mediated by PTSD or by other factors.

BIOLOGICAL MODEL

PTSD has a biological basis different from that of depression or a normal stress reaction. The γ -aminobutyric acid/glutamate system appears to be involved, and there is indirect evidence for the involvement of serotonin and norepinephrine. The negative feedback inhibition of cortisol is heightened in PTSD, such that there is enhanced suppression of cortisol in response to low doses of dexamethasone, opposite to that seen in depression. Hippocampal volume may also be decreased. The putative circuit for anxiety in this disorder involves the amygdala, hippocampus, cortex, and periaqueductal grey area. (For a review of the biological model, see references 8 and 9.)

Research Need: There are a number of outstanding questions relating to the biological model.

- 1. Which parts of the putative circuit mediate which symptoms and signs of PTSD?
- 2. How do treatments alter activity in these circuits?

- 3. What are the neurotransmitters involved in mediating the causation of PTSD symptoms and recovery?
- 4. How can a traumatic event trigger a cascade of neurobiological changes that are seen in PTSD?

PREDICTIVE FACTORS FOR PTSD

Certain environments are more likely to involve exposure to trauma, and therefore, individuals in these areas have an increased risk of developing PTSD, for example, soldiers in armed conflict, survivors of a natural disaster, or individuals living in many inner cities. What are the factors influencing whether a traumatic experience will result in PTSD? These can be characterized broadly as factors specifically related to the trauma and factors related to the individual.

Factors Related to the Trauma

Specific traumas differ in the level of stress induced and the likelihood of producing PTSD. For example, exposure to the trauma of rape is more likely to result in PTSD than experience of other assaultive violence or exposure to natural disasters. Important predictive factors include the involvement of interpersonal violence, severity of the trauma, chronicity of the traumatic experience, whether it involves a fear of dying, and most importantly, whether the recovery environment is associated with secondary stressors, such as pain, relocation, job loss, or blame.

Factors Related to the Individual

There is a high degree of correlation between the level of danger perceived by the individual exposed to the trauma and the likelihood of developing PTSD. Previous exposure to trauma and a personal or family history of psychiatric disorder, particularly depressive disorder, are all predictors of PTSD related to the individual.

The intensity of the initial reaction to a traumatic experience is an important predictor of chronicity. Intense emotional responses are normally seen during the first 2 weeks following trauma. The physician should provide the victim with psychosocial support during these first 2 weeks. Sleep disturbance and symptoms of anxiety should improve during this period. However, if there is no improvement in the acute stress response at 2 weeks, the physician should consider instituting treatment (see Management of PTSD below).

CLINICAL COURSE OF PTSD

Community studies agree that around two thirds of people exposed to a traumatic experience will have a normal acute response to stress and will not develop any pathologic sequelae. For the remaining one third, the principal outcome 3 months after the traumatic experience is PTSD, either alone (5% to 10%) or in combination with major depression (5% to 30%). Previous vulnerability to depressive or anxiety disorders will increase the likelihood that PTSD will develop after the traumatic experience. Other possible sequelae of trauma exposure are major depression and other anxiety disorders.

Why do some individuals develop PTSD after a traumatic experience while others develop conditions such as major depression? Both vulnerability and protective factors come into play in the transitional stage from the acute stress response. In this critical phase, the acute reaction will stabilize in some individuals, whereas there is progressive dysregulation in others. We could argue that risk factors specific to different psychiatric disorders as well as risk factors for psychiatric disorders in general are operating during this phase to determine the pattern of dysregulation that leads to PTSD or other conditions.

Exposure to trauma compromises physical health, irrespective of whether PTSD develops after the acute stress response. One year after trauma exposure, victims are more likely to report physical symptoms than people not exposed to a traumatic experience. Evidence from studies of combat exposure suggests that premature mortality and chronic physical illness are the long-term consequences of trauma, independent of the victim's meeting full diagnostic criteria for PTSD.

The first exposure to a traumatic experience modifies vulnerability. Trauma victims are likely to develop clinically significant sequelae to any subsequent exposure to trauma, particularly if their response to the first traumatic experience involved a degree of dyscontrol or was perceived as a personal failure. People with a history of PTSD commonly experience multiple episodes of the disorder after exposure to additional traumas. Given that the average duration of an episode is more than 7 years, these people will spend a significant proportion of their lives suffering from the symptoms of PTSD.

PTSD is associated with an increased risk for other anxiety disorders, depression, and substance abuse. The risk of developing secondary comorbid disorders is related to the severity of trauma and consequent complexity of the PTSD reaction. Since trauma exposure is often chronic in developing countries, PTSD is even more likely to be comorbid with secondary anxiety and depression.

Many of the cases in which PTSD is complicated by secondary depression, substance abuse, social drift, and/or character changes occur in individuals who have been severely traumatized as children, before exposure to a salient traumatic event as adults. Prolonged traumatizations, such as captivity or extensive and repeated experience of war, may also generate pervasive and intractable forms of PTSD.

RECOVERY FROM PTSD

Once PTSD has developed, it is often a chronic and recurring condition, generally without spontaneous remission. Individuals with PTSD, and even some clinicians, have had a low expectation of treatment outcome, with complete remission considered an unachievable goal in many cases. This expectation has changed with recent clinical studies of SSRIs and cognitive-behavioral therapy. Remission, or freedom from most symptoms, is now accepted as a realistic treatment goal in many patients with PTSD, and many others will improve substantially with treatment while retaining some symptoms. For the majority of patients, however, mild symptoms such as numbing of affect or irritability, which are linked to the recollection of trauma, will persist. The condition can be refractory to treatment and remain disabling in some patients.

Even temporary disability and PTSD in response to a traumatic experience is a risk factor for reactivated PTSD, where patients reexperience intrusive memories of the original trauma, if they again become trauma victims. Physicians should consider the need for long-term followup of their patients in remission, paying particular attention to those at a high risk of further traumatization.

Since many patients with partial remission of their symptoms will still have functional impairment and are likely to continue high utilization of medical services, there is a case to be made for the establishment of rehabilitation programs, as for people with physical disorders, with a focus on getting the patients back to work. A case manager may be used to track patients through the system and quantify their demand on different medical services.

Creating rehabilitation programs specific to PTSD is dependent on more information about the nature of the disability related to the condition. For example, what deficits in cognition and memory should we address? Whatever the rehabilitation model, we see an obligation on the part of employers, particularly in the emergency services, to keep people—for example, firefighters—in their occupational role. This raises the whole issue of employers and their responsibility in recognition, treatment, and rehabilitation of PTSD sufferers.

Research Needs:

- 1. Clinical studies are needed to further establish response rates for complete and partial remission to treatment. Further research in the area of treatment resistance is also needed.
- 2. PTSD causes specific changes, such as irritability and sensitivity to stimulus or noise. Further research on the features of disability related to PTSD is needed as the basis for specific rehabilitation programs.

MEASURING OUTCOME IN PTSD

Outcome is measured by improvement in different dimensions of PTSD—symptoms (all and specific to PTSD), functional disability or quality of life, and comorbidity—and by global assessment of patients.

Many different instruments are available to researchers and clinicians for the identification of cases of PTSD or measurement of outcome in PTSD (see Shalev, this supplement).¹⁰ The most widely used instrument in clinical trials is the Clinician Administered PTSD Scale (CAPS), and most of the clinical evidence on outcome measures in PTSD has been acquired using it. A computerized version of the CAPS has been developed and published.¹¹

The CAPS is a single global scale measuring multiple dimensions, but it is complex and takes 45 minutes to complete. Simpler and shorter instruments include the PTSD Symptom Scale Interview (PSS-I),¹² the 8-item Treatment Outcome of PTSD (TOP-8),¹³ and the Posttraumatic Diagnostic Scale (PTDS),¹⁴ each of which takes 20 minutes or less to perform. These may be more widely useful for rating the severity of PTSD. On the TOP-8, scores of 0 to 6 correspond to none-to-borderline level of symptoms, 7 to 11 correspond to mild, 12 to 20 to moderate, and 21 to 32 to severe symptoms.

The TOP-8, PTDS, and PSS-I are fully developed instruments, showing a high degree of correlation with longer interviews. There is also a high correlation between the short TOP-8 scale and its longer, more comprehensive parent scale, the Structured Interview for PTSD (SIP).¹⁵ Other even shorter instruments are under development.

Research Need: A global instrument, similar to the multidimensional panic disorder scale, needs to be developed that will target all the dimensions, including all the pertinent symptom clusters, extent of disability, and quality of life. One such scale, the Short PTSD Rating Interview (SPRINT), is now under development.

MANAGEMENT OF PTSD

There are 3 aspects to the management of PTSD: education, psychosocial support and/or treatment, and psychopharmacologic treatment.

Primary care physicians have an immediate educative role in explaining to victims that they will likely experience anxiety, depression, irritability, nightmares, and even flashbacks as part of the normal reaction to the stress of trauma. They should encourage patients to talk about the traumatic experience with their family or friends, stressing the importance of sharing their feelings with the people they trust. Physicians should also recognize that some victims will prefer to distance themselves from their experience and will not want to talk about it. Education should continue with advice about short-term health behavior and avoidance of excessive use of alcohol, nicotine, or other drugs, since subjects frequently drink more in this context, and habitual smokers generally smoke more. Physicians can also be effective in managing other stressors.

Primary care physicians should provide patients with psychosocial support, especially during the first 2 weeks after exposure to trauma, and evaluate the need for specialized intervention. One or 2 counseling sessions during this period will help patients to deal with their emotional distress and will create a sense of safety, which is important to the well-being of the traumatized patient. Counseling may extend to minimizing the fear of any further threat, for example, in the management of refugees.

Medical opinion is divided about providing symptomatic relief for sleep disturbance, and the evidence is limited. If the patient has experienced 4 consecutive nights without sleep, this is an appropriate threshold for the physician to provide symptomatic relief, generally with a nonbenzodiazepine hypnotic.

At the end of 2 or 3 weeks, if patients remain extremely distressed, noncommunicative, or unable to function, PTSD is likely to develop, and more specialized intervention should be considered. Primary care physicians should either prescribe appropriate drug therapy or refer patients to a mental health specialist (see Psychological Treatment and Pharmacologic Treatment below).

Debriefing in the acute phase should not be confused with early neatment of PTSD. There is increasing interest in providing debriefing to trauma victims, but it should be remembered that its purpose is to help them manage acute stress. The few studies conducted confirm that debriefing reduces stress acutely, but they provide no evidence that it is effective in decreasing the subsequent rate of developing PTSD.

Psychological Treatment

Cognitive-behavioral treatments are effective in PTSD, and they are the most studied psychological treatments for the disorder. They include exposure therapy, stress inoculation training, and cognitive therapy. What makes these techniques specific to the management of PTSD is the focus on the traumatic event.

In exposure therapy, the patient is repeatedly exposed to the memory of the traumatic experience. This treatment is time efficient, often achieving an improvement in 9 to 12 sessions. In applying exposure therapy and other cognitivebehavioral techniques, an issue that requires particular consideration is the relationship between the patient and the therapist. Without an appropriate level of trust, compliance with treatment may be compromised by the patient's not regularly attending the sessions. However, the dropout rate from studies of cognitive-behavioral treatments of PTSD is around 20%, a rate not higher than that found in other anxiety disorders. Another issue related to studies of cognitivebehavioral treatment is the selection of an appropriate control group. As for the generalizability of exposure therapy, early dissemination studies, in which counselors of rape victims have been taught how to perform the techniques developed by researchers, have provided encouraging results.

Studies of cognitive-behavioral therapy in PTSD have included patients who were receiving drug therapy. There is no evidence from these studies that antidepressant drug therapy interferes with psychological treatment of PTSD. In fact, effective medication may assist cognitivebehavioral therapy.

For individuals with prolonged, complex, and intractable PTSD, long-term supportive therapies and therapies designed to alleviate subsets of symptoms such as anger and violence are appropriate.

Pharmacologic Treatment

The goals of pharmacotherapy are to reduce core PTSD symptoms, reduce disability, improve quality of life, improve resilience to stress, and reduce comorbidity.

Clinical efficacy. The consensus group considered the quality of clinical evidence for the current pharmacotherapeutic options: tricyclic antidepressants (PCAs), monoamine oxidase inhibitors (MAOIs), selective serotonin reuptake inhibitors (SSRIs), newer antidepressants, and convulsants, and benzodiazepines.

Double-blind data support the efficacy of the TCAs amitriptyline and imipramine. By contrast, desipramine is clinically ineffective in PTSD, and it is questionable whether noradrenergic-specific drugs in general will have substantial activity in this condition.

Controlled clinical evidence demonstrates the efficacy of MAOIs (phenelzine) and promising early studies on intervention with nefazodone and anticonvulsants (carbamazepine, sodium valproate, and lamotrigine).

Well-controlled data also show the clinical efficacy of the SSRIs in PTSD, much of which will be published fully within the next 2 years.

No studies support the efficacy of benzodiazepines in PTSD. On the contrary, some evidence suggests that the clinical condition of patients with PTSD deteriorates when they are treated with benzodiazepines, with impairment of learning in a clinical situation and disturbing withdrawal symptoms. Benzodiazepines also potentiate the effects of alcohol.

We discussed the place of benzodiazepines in the shortterm management of acute sleep disturbance and, on balance, took the view that their use should be avoided even in this context, and that nonbenzodiazepine hypnotics should be used in preference.

Similarly, we consider TCAs inappropriate because they cause daytime drowsiness and cardiac toxicity in overdose, impair reaction times, and increase the risk of road traffic accidents. *Treatment of choice.* On the basis of the current level of clinical evidence and from controlled studies under review, we recommend SSRIs as the first-line drug therapy for PTSD. With their spectrum of activity, they are most effective in meeting the defined treatment goals for the condition, in that they reduce symptoms and disability, improve functionality and resilience to stress, and treat comorbid depression and anxiety.

Appropriate management strategy. We recommend considering starting treatment with an SSRI 3 weeks after exposure to a traumatic experience in those patients with no improvement in their acute stress response or, alternatively, referring them to a mental health specialist. Medication should start with a low dose of SSRI, and the dose should be gradually titrated upward to the same or higher level than that used to treat depression. The most appropriate psychotherapy is exposure therapy as part of cognitive-behavioral treatment.

Expert opinion in the field generally supports the use of psychotherapy for mild PTSD and a combination of drug therapy and psychotherapy for moderate and severe PTSD, although further studies of combination therapy are needed.

An appropriate trial of initial drug therapy is 3 months. If there is no substantial response to treatment, the most appropriate form of management is referral to a specialist. Referral may be made sooner if the patient's condition is severe or complicated by comorbid psychiatric disorders. Effective pharmacotherapy should be continued for 12 months or longer, depending on the severity and duration of jillness.

Psychotherapy should be continued for 6 months, with follow-up therapy, as necessary.

Research Needs: There are outstanding research questions relating to the management of PTSD.

- 1. We need more data on when treatment should be started and whether early intervention has a beneficial effect on the long-term outcome of PTSD.
- 2. We need to compare the efficacy of drug therapy, cognitive-behavioral therapy, and a combination of the 2 therapeutic approaches, and we need to know in what sequence the 2 should be combined.
- 3. We need to know more about the risk of reactivation after remission and the appropriate long-term follow-up of patients.
- 4. We need further studies of refractory PTSD.

We also advocate the collection of data in PTSD studies in a standardized way that will allow the pooling of data for secondary analysis. For example, we envisage establishing a center that could act as a receiving site for study data.

Clinical Guidelines for Primary Care Management of PTSD

The consensus group agreed on the following key clinical points:

- 1. In the first days after exposure to trauma, educate victims about the normal stress response and encourage them to talk about their experience to family and friends.
- 2. During the first 2 weeks after trauma, provide victims with 1 or 2 counseling sessions to deal with their distress and create a sense of safety and observe them to evaluate the need for specialized interventions.
- 3. Four consecutive nights of sleep disturbance is an appropriate threshold for providing symptomatic relief. Avoid the use of benzodiazepines to treat acute sleep disturbance. In preference, prescribe nonbenzodiazepine hypnotics.
- 4. At 3 weeks, if there is no clinical improvement, for example, the patient is extremely distressed or is not relating to family or friends, prescribe drug therapy for PTSD or refer the patient to a mental health professional.
- 5. SSRIs are generally the most appropriate choice of first-line medication for PTSD.
- 6. Benzodiazepines are generally ineffective in treating PTSD and may worsen the clinical condition of patients.
- 7. Continue effective drug therapy in most patients for 12 months or longer.
- 8. Refer to a psychiatrist those patients who are refractory to initial drug therapy at 3 months and those with complicating comorbid conditions.

Drug names: amitriptyline (Elavil and others), carbamazepine (Tegretol and others), desipramine (Norpramin and others), dexamethasone (Decadron and others), lamotrigine (Lamictal), nefazodone (Serzone), phenelzine (Nardil).

REFERENCES

- Greenberg PE, Sisitsky T, Kessler RC, et al. The economic burden of anxiety disorders in the 1990s. J Clin Psychiatry 1999;60:427–435
- McFarlane AC. Posttraumatic stress disorder: the importance of clinical objectivity and systematic research. Med J Aust 1997;166:88–90
- Kessler RC, Sonnega A, Bromet E, et al. Posttraumatic stress disorder in the National Comorbidity Survey. Arch Gen Psychiatry 1995;52:1048–1060
- 4. Hendin H, Haas AP. Suicide and guilt as manifestations of PTSD in Vietnam combat veterans. Am J Psychiatry 1991;148:586–591
- Buda M, Tsuang MT. The epidemiology of suicide: implications for clinical practice. In: Blumenthal SI, Kupfer DJ, eds. Suicide Over the Life Cycle: Risk Factors, Assessments and Treatments of Suicide Patients. Washington, DC: American Psychiatric Press; 1981
- Guze SB, Robins E. Suicide and primary affective disorders. Br J Psychiatry 1970;117:437–438
- Kessler RC, Frank RG. The impact of psychiatric disorders on work loss days. Psychol Med 1997;27:861–873
- Nutt DJ. The psychobiology of posttraumatic stress disorder. J Clin Psychiatry 2000;61(suppl 5):24–29
- Ballenger JC. Translational implications of the amygdala-stria terminalis model for the clinical anxiety disorders. Biol Psychiatry 1998;44: 1204–1207
- Shalev AY. Measuring outcome in posttraumatic stress disorder. J Clin Psychiatry 2000;61(suppl 5):33–39
- Neal LA, Busuttil W, Herapath R, et al. Development and Validation of the Computerized Clinician Administered Post-Traumatic Stress Disorder Scale-1-Revised. Psychol Med 1994;24:701–706
- Foa EB, Riggs DS, Dancu CV, et al. Reliability and validity of a brief instrument for assessing post-traumatic stress disorder. J Trauma Stress 1993; 6:459–473
- 13. Davidson JR, Colket JT. The eight-item treatment-outcome post-traumatic stress disorder scale: a brief measure to assess treatment outcome in posttraumatic stress disorder. Int Clin Psychopharmacol 1997;12:41–45
- 14. Foa EB, Cashman L, Jaycox L, et al. The validation of a self-report measure of posttraumatic stress disorder, the posttraumatic diagnostic scale. Psychological Assessment 1997;9:445–451
- 15. Davidson JR, Malik MA, Travers J. The Structured Interview for PTSD (SIP); psychometric validation for DSM-IV criteria. Depress Anxiety 1997; 5:127–129

J Clin Psychiatry 2000;61 (suppl 5)