CHAPTER 7

Posttraumatic Stress Disorder

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Posttraumatic stress disorder (PTSD) is classified as an anxiety disorder and is defined by exposure to a severe traumatic event and the presence of a cluster of symptoms (American Psychiatric Association 2000). Individuals must have experienced, witnessed, or learned of an event that involved death, injury, or threat to physical integrity and reacted to that event with intense fear, helplessness, or horror. To meet diagnostic criteria, traumatically exposed persons must also have symptoms of re-experiencing the event, avoidance of reminders of the event or numbing of responsiveness, and increased symptoms of arousal or vigilance. The symptom pattern must be present for more than 1 month and result in clinically significant distress or impairment of functioning.

PTSD was first formally recognized by the psychiatric community in 1980 (American Psychiatric Association 1980). During and after the war in Vietnam, clinicians observed that a substantial portion of soldiers were experiencing protracted problems with readjustment into civilian society due to symptoms related to their wartime experiences. A core constellation of psychiatric symptoms became the basis for diagnostic criteria for PTSD, but other difficulties were also observed. Among these were intermittent acts of aggression or violence. Other

symptoms associated with PTSD, but not required for the diagnosis, include impaired interpersonal relationships, impaired affect modulation, self-destructive and impulsive behaviors, feelings of constant threat, and changes in personality characteristics. The American Psychiatric Association's practice guidelines note that some individuals with PTSD have an increased expectation of danger that results in an "anticipatory bias" in their perception of their environment and increased readiness for "flight, fight, or freeze" responses (Ursano et al. 2004). This increased readiness for aggression may take the form of a reduced ability to tolerate mild or moderate slights, resulting in acts that are disproportionate to the degree of provocation. Other psychiatric conditions commonly comorbid with PTSD include major depression, substance abuse disorders, and other anxiety disorders (American Psychiatric Association 2000).

Almost all studies of aggression and violence in patients with PTSD have been conducted among combat veterans from the Vietnam era. Violence in patients who develop PTSD in response to sexual assaults, physical assaults, motor vehicle crashes, acts of terrorism, or exposure to natural and manmade disasters has not been well studied. In contrast to other patients with PTSD (e.g., those whose PTSD results from a motor vehicle accident or an isolated sexual assault), war veterans during combat will have experienced extended periods of heightened vigilance and arousal lasting weeks to months and extreme and repeated interpersonal violence. Exposures include being shot at by enemy forces, killing enemy forces, and sometimes being responsible for the wounding or death of noncombatants. Under certain wartime conditions, some may also witness or participate in repeated non-warfare acts of abusive violence or killing of prisoners or civilians (Laufer et al. 1984). Some civilian law enforcement officers may also have similar, but less repeated, exposures.

Veterans with PTSD demonstrate higher levels of anger, problems with anger regulation, increased levels of criminality, increased levels of violence, and greater potential for serious acts of violence when compared with other patient populations. Domains of anger problems include inaccurate perception and processing of environmental cues, heightened physiological and emotional activation, and behavioral inclinations to act in antagonistic or confrontational ways (Chemtob et al. 1997). Patients with regulatory deficits in all three domains display anger and aggression that has been labeled a "ball of rage" (Chemtob et al. 1997).

Although the literature on violence and PTSD is extensive, findings between studies have shown multiple possible explanations for this

association and leave open many questions. Are those exposed to serious personal threat more likely to have come from troubled backgrounds prior to the trauma? Does exposure to violence lead to future acts of violence directly, or is it mediated through the development of PTSD? What is the role of comorbid substance use and violence?

Perhaps due to the complex number of pathways to violence, models to predict future acts of violence among veterans with PTSD have not shown useful predictive value. Among one group of veterans with PTSD, demographic variables, exposure to atrocities, severity of PTSD symptoms, severity of drug and alcohol problems, past violent behaviors, past suicidal behaviors, and prior treatment information were used in an attempt to develop such a model (Hartl et al. 2005). Only prior violence history was useful in predicting postdischarge violence; PTSD and depression severity were both poor predictors of high- and low-risk group membership.

Although no precise model exists for predicting violence among patients with PTSD, there are identified risk factors for future violence that can be the focus for management and treatment. Research during the past three decades has examined multiple risk factors in an effort to determine which seem most strongly associated with the violence in patients with PTSD.

Risk Factors for Violence or Aggression

Childhood traumas, level of combat exposure, PTSD symptoms and severity, number of combat roles, exposure to atrocities, and preservice antisocial behaviors have all been examined in relationship to later antisocial behavior and violence. The studies often used different measures, controlled for different potentially contributing variables, and sometimes had conflicting findings. When examined together, preservice antisocial behavior and level of combat exposure were associated with postservice antisocial behavior, including incidents of violence, other nonviolent illegal behaviors, occupational problems, and nonviolent interpersonal problems (Resnick et al. 1989). Number of combat roles, subjective stress in combat, number of specific stress exposures, and total PTSD symptom severity have all been associated with postservice assault and weapons charges (Wilson and Zigelbaum 1983). Among participants in the National Vietnam Veterans Readjustment Study (NVVRS; Kulka et al. 1990), male veterans with PTSD reported an average of 13.3 acts of violence in the preceding year compared with 3.5 acts of violence in those without PTSD. They were also 1.5 times more likely to have been arrested or jailed and 3 times as likely to have been

convicted of a felony crime. In another analysis of the NVVRS data, premilitary behaviors and experiences and postservice PTSD were both associated with postservice antisocial behavior (Fontana and Rosenheck 2005).

Compared with other psychiatric inpatients, veterans hospitalized with severe PTSD were seven times more likely to have engaged in one of more acts of violence in the 4 months prior to hospitalization, six times more likely to have destroyed property, six times more likely to have threatened others without a weapon, four times more likely to have engaged in physical fights, and three times more likely to have made threats with a weapon (McFall et al. 1999). Severity of PTSD symptoms was also associated with increased risk to make threats of violence without a weapon, engage in physical fights, and make threats with a weapon. Among veteran psychiatric inpatients with any diagnosis, veterans with combat exposure were more likely to engage in assaults or assault-related behavior during hospital admission than veterans without such experiences (Yesavage 1983).

Premilitary problems, exposure to war zone atrocities, and postwar problems were common among veterans with PTSD (Hiley-Young et al. 1995). One-third of veterans reported childhood physical abuse and approximately one-half endorsed one or more significant adolescent behavioral problems. Eighty-six percent endorsed witnessing abusive war zone violence, and 91% both witnessed and participated in abusive violence (hurting, killing, or mutilating Vietnamese). Postmilitary problems included violence toward their spouse (58%), violence toward others (71%), drug problems (62%), and alcohol problems (73%). Interestingly, no association between premilitary factors and postmilitary violence or criminal behavior was found. Participation in killing during war was associated with postmilitary violence toward others and toward spouses.

One of the few studies that examined the association between PTSD and violence in individuals who developed PTSD as a consequence of mostly non-wartime experiences was conducted in a population of 1,140 incarcerated male felons (Collins and Bailey 1990). Prison arrest records indicated that 14% were currently incarcerated for acts of expressive violence (homicide, rape, or aggravated assault). Only 2.3% of the sample met study criteria for presence of PTSD. Of those, 31% reported combat trauma. Although most inmates did not meet criteria for the disorder, 795 (70%) endorsed at least one of nine symptoms of PTSD. When demographic variables, antisocial characteristics, and substance abuse were controlled for, those who met criteria for the diagnosis of PTSD were 4.58 times more likely to be currently incarcerated for

homicide, rape, or assault and were 6.75 times more likely to have been arrested for violence within the past year. Among those who did not meet full criteria for PTSD, the presence of each additional symptom of PTSD increased risk of current incarceration for a violent crime (odds ratio [OR] 1.22) and for arrest for violence in the past year (OR 1.26). Of those arrested for a violent crime who endorsed at least one symptom of PTSD (N=80), most reported the PTSD symptoms began 1 or more years prior to the arrest. This suggested that the presence of the symptoms may have contributed to the commission of the crime.

Family Violence

Patients with PTSD may direct aggression toward intimate partners. On the Standard Family Violence Index (throwing something at someone, pushing, grabbing, shoving, slapping, kicking, biting, hitting, beating up, threatening with a gun or knife, or using a gun or knife on someone), veterans with PTSD endorsed an average of 22 such acts in the past year (Beckham et al. 1997). In contrast, combat veterans without PTSD endorsed an average of 0.2 such acts in the past year. Socioeconomic status, aggressive responding, and PTSD severity were associated with increased violence. Yet another study found that presence of PTSD may mediate the effect of combat exposure on later intimate partner violence (Orcutt et al. 2003). Among multiple studies of Vietnam-era veterans, past-year partner violence rates range from 13% to 58%, with higher rates generally seen among inpatients with substance dependence, PTSD, or other psychiatric disorders (Marshall et al. 2005). PTSD severity was also correlated with partner abuse severity. Partner physical abuse has also been associated with interactions of alcohol consumption (frequency and amounts) and severity of hyperarousal symptoms (Savarese et al. 2001). Higher rates of depression and drug abuse are seen in veterans who had engaged in partner violence (Taft et al. 2005).

In a study of veterans with either PTSD or depression, but not both conditions, those in each group endorsed similar rates of partner violence (roughly 80%) and severe partner violence (roughly 40%) during the past year (Sherman et al. 2006). Compared with control couples in which the veteran did not currently meet criteria for a serious psychiatric illness, those with either depression or PTSD were twice as likely to endorse any act of partner violence and four times as likely to endorse an act of severe partner violence. The study did not include veterans with comorbid depression and PTSD, so it did not assess the relationship of comorbid illness and partner violence.

Firearm Ownership and Firearms Behaviors

Possession of firearms or presence of firearms within the household may increase the risk of potential serious violence toward others or may elevate the risk of a successful suicide act. Compared with veterans with substance use problems, veterans with PTSD reported owning more than four times as many total firearms (mean, 3.2 vs. 0.72), more than five times as many handguns (mean, 1.6 vs. 0.28), and five times as many rifles or shotguns (mean, 4.3 vs. 0.86). Interestingly, there was no difference in overall gun ownership between the two groups prior to military service (mean, 1.69 vs. 1.68) (Freeman and Roca 2001). Twenty-two percent endorsed aiming a gun at a family member; 21% endorsed firing a gun within their house; 39% endorsed firing a gun to protect home, self, or family; and 54% endorsed holding a loaded gun with suicide in mind. In a separate study, 33% of the PTSD group endorsed carrying a gun on their person at least some of the time, and 33% endorsed killing or mutilating an animal "in a fit of rage" (not while hunting) (Freeman et al. 2003). Both studies were conducted among clinical samples of veterans with chronic combat-related PTSD. The combination of firearm-related aggressive acts and the presence of numerous firearms in homes of veterans with PTSD suggest a strong potential for lethal violence against others or successful suicide.

Suicide

Patients with PTSD are also at increased risk of suicide or suicide attempts. Comorbidity of PTSD and other psychiatric conditions is common, and a substantial portion of patients with PTSD are diagnosed with three or more other conditions (Brady et al. 2000a). The most commonly comorbid conditions are depressive disorders, substance use disorders, and other anxiety disorders, all of which are associated with an increased risk of suicide. In one study, patients with comorbid depression and PTSD were at increased risk of suicide attempts compared with patients with only depression (Oquendo et al. 2003). In a second study, the presence of Cluster B personality disorders (paranoid, narcissistic, borderline, or antisocial personality) in addition to PTSD and depression further increased the risk of suicide attempts (Oquendo et al. 2005). In both of these studies, the majority of subjects were non-veteran women.

Subthreshold PTSD can also develop after exposure to traumatic events. Individuals not meeting full diagnostic criteria for the disorder experience comparable levels of impairment and suicidality when compared with patients who meet full criteria for the disorder (Zlotnick et

al. 2002). In one large national screening study, roughly one in four subjects reported at least one PTSD symptom of at least 1 month's duration (Marshall et al. 2001b). Functional impairment, number of comorbid disorders, presence of a depressive disorder, and current suicidal ideation increased linearly and statistically with each increasing additional PTSD symptom. Individuals with subthreshold PTSD were at greater risk of suicidal ideation even after controlling for the presence of a depressive disorder. These studies highlight the importance of screening all patients with a history of trauma for presence of PTSD symptoms that may increase risk of suicide or suicide attempts.

Assessment and Management of Posttraumatic Stress Disorder and Violence

There are numerous guidelines for the assessment and clinical management of PTSD (National Center for PTSD 2004; Ursano et al. 2004; VA/DOD Clinical Practice Guideline Working Group 2004). All guidelines suggest that management should be prioritized according to the degree to which each symptom or behavior is causing distress or loss of function or may affect future safety. A high percentage of patients with PTSD experience comorbid conditions such as depression or substance abuse. Such comorbid conditions must also be evaluated and may need to be addressed first, because they may be the source of greatest risk for morbidity or future dangerousness.

Knowing the nature of the events leading to the development of PTSD is of key importance in assessing potential future dangerousness. Combat exposures and direct interpersonal violence, such as physical assault, appear much more likely to lead to PTSD-associated violence than traumas such as motor vehicle crashes or natural disasters. Areas to inquire about when assessing combat veterans or others who have experienced extreme acts of interpersonal violence are outlined in Table 7–1. Patients should be asked to elaborate on the details, frequency, and duration of each endorsed experience.

As with all psychiatric evaluations, patients with PTSD should be questioned about present suicidal ideation and past suicidal behaviors. High rates of comorbid depression, substance use disorders, and tendency toward firearm ownership all increase the risk of suicide as well as the risk of harm to others. Each of these areas should be carefully assessed in both acute and chronic care settings. Because spouses are often the most available target of violence, patients should be asked about patterns of interaction and conflict resolution within relationships. If their responses are guarded or inconsistent, it may be necessary to

TABLE 7–1. Violence risk factor assessment in the evaluation of patients with posttraumatic stress disorder

Have you been the victim of a violent sexual or physical assault?

—How many times have you been assaulted?

—Did the assault(s) involve the use of a weapon?

Have you been in combat?

—Have you killed or wounded another in combat?

—Did you participate in or observe killing, mutilation, or torture of civilians?

Are there specific settings or events that cause you to become irritable or "on guard"?

Have you been involved in a physical altercation within the past 6 months?

Do you own a firearm?

—Do you keep it loaded?

—Do you carry a firearm on your person or keep one "at arm's length"?

—Have you ever pointed a firearm at another person as a warning or threat?

contact family members for corroborating information. If spousal abuse is active and severe, court protective orders or other protective actions may be needed until other solutions can be developed.

If patients endorse angry or hostile attitudes or are the victims of violent interpersonal assault they should be asked about their own history of violent acts. Frequency, severity, and time duration since most recent episode should be obtained. Potential screening questions and follow-up elaboration questions are provided in Table 7–2. For each past act of violence, patients should be questioned about the specific events leading up to the incident; specific provocation by the target of their violence; whether alcohol or drugs were involved; and how their current situation, condition, attitudes, and recent behaviors differ from those present at the time of the prior act. If current conditions closely parallel those present at the time of past acts of violence, specific behavioral "trigger avoidance" or "emotional defusing" plans should be developed and rehearsed in the clinician's office. Shortened intervals between treatment sessions, warnings to individuals specifically at risk, and possibly hospitalization or other protective interventions should also be considered. In all instances, the treatment record should reflect the components of the risk assessment and management decision process.

Clinicians should always be vigilant for their own safety. In emergency department settings, agitated, intoxicated patients with PTSD

TABLE 7–2. Acts of aggression inventory: "In the past year, have you..."

Event inventory

1. Been involved in a physical or verbal altercation with a stranger?
2. Been involved in a physical or verbal altercation with an acquaintance?
3. Been involved in a physical or verbal altercation with a spouse or relative?
4. Hit, kicked, or otherwise harmed or killed an animal in anger?
5. Damaged property as a consequence of being angry?
6. Contemplated or attempted suicide?

For each positive response:

a. Were you under the influence of alcohol or drugs at the time?
b. Did you have in your possession a firearm, knife, or other weapon?
c. Did you use or consider using the weapon?
d. When was the last time such an incident occurred?
e. What were the specific circumstances that led up to the event?
f. What was the outcome of the event?
g. How did it end?
h. Did you feel your behavior was appropriate under the circumstances?
i. Would you likely respond the same way in a similar situation?
j. How commonly would you encounter similar situations?

may need to be relocated to quieter and less distracting settings. Personal belongings and clothing should be checked for firearms or other weapons. All personnel should be trained in emergency response and restraint techniques. Hospitalized patients with PTSD should be carefully assessed for potential violence prior to discharge. Follow-up visits should be scheduled to occur shortly after discharge, preferably with a provider known to the patient. Family members should be educated on signs of pending violent behavior and given direction on methods for obtaining an emergent reevaluation or engaging other safety plans (such as leaving the home or calling police) if they perceive a threat of violence.

Shoenfeld et al. (2004) provided an overview of pharmacological treatments for PTSD. Most studies of treatment for PTSD have been in non-veteran populations and have not examined the specific efficacy of these agents on symptoms of aggression or irritability. The selective serotonin reuptake inhibitors (SSRIs) have been shown to be effective, well tolerated, and safe in treatment of non–combat-related PTSD. Sertraline was effective during the 12-week acute and 24-week continua-

tion stages of treatment, with improvements seen in intrusive symptoms, avoidance symptoms, and arousal symptoms (Brady et al. 2000b; Davidson et al. 2001b; Londborg et al. 2001). The mean dosage at completion was roughly 150 mg/day. Further ongoing treatment was also effective in preventing relapse of PTSD (Davidson et al. 2001a), and study participants reported improvements in quality of life and functional measures. Participants who discontinued the drug had a worsening of symptoms and a decline in quality of life (Rapaport et al. 2002). Roughly 80% of the participants in these trials were women, and only about 5% had PTSD as a consequence of combat experiences, so the degree of benefit of sertraline in combat veteran populations is not known.

Similar response rates and improvements in symptoms and function were seen in controlled studies of paroxetine versus placebo in the treatment of PTSD (Marshall et al. 2001a). The efficacy of 20 mg/day was comparable with that seen using 40 mg/day. The majority of participants were women, and only 5%–7% had PTSD as a consequence of combat exposure. In one study examining the efficacy of fluoxetine in treatment of PTSD, the majority of the participants were men (80%), and more than half had PTSD from combat experience or other wartime exposures (Martenyi et al. 2002). Dosages in the range of 60 mg/day reduced symptoms; however, the response was not as robust as in other SSRI studies. The investigators did not attempt to analyze the effect of trauma type on treatment response.

Recent studies have shown efficacy for prazosin (an α_1 receptor–blocking antihypertensive medication) in reducing nightmares, improving sleep quality, reducing psychological responses to trauma cues, and improving global clinical status (Daly et al. 2005; Raskind et al. 2006; Taylor et al. 2006). These results suggest that prazosin might also be of benefit in reducing irritability and aggressive behavior. Many case and case series reports also suggest the use of other antidepressants, mood stabilizers, and atypical antipsychotic medications for augmentation treatment of refractory PTSD symptoms, including anger and irritability, that may be tied to potential acts of violence (Friedman 2006; Schoenfeld et al. 2004).

Among available psychotherapeutic choices, cognitive-behavioral treatments have been shown to be most effective in treating patients with PTSD (Ursano et al. 2004). Within this class of treatments, both prolonged exposure therapy (guided imagery of the events and in vivo experiences) and cognitive therapy or cognitive processing therapy (correction of distorted perceptions or appraisal of events) have been shown to have benefit in trauma survivors. As with most clinical trials of PTSD treatments, the early studies have mostly involved women

with sexual assault histories or other single-event traumas rather than PTSD arising from combat.

Case Example 1

A 39-year-old Drug Enforcement Agency (DEA) officer was medically retired 2 years ago after he had been shot in the face at close range during a drug raid. During his 15 years with the agency he had seen multiple shootings and had observed fellow officers killed in the line of duty. During covert assignment in South America he had seen drug smugglers torture, kill, and mutilate the bodies of rival gangs. In the past 5 years he had had frequent nightmares with themes of killing and pervasive danger, from which he awakened sweating and shaking. He became progressively withdrawn, ultimately divorced his wife of 10 years, and no longer visited or spoke with family members. He was constantly vigilant of his environment and startled at the sound of loud noises. He presently has frequent suicidal ideation but relates no history of acts of self-harm. He has a concealed weapons permit and carries a concealed handgun on his person whenever he leaves his apartment. He experienced some improvement in his depressed mood, lack of pleasure, and poor sleep after being started on sertraline by his primary care physician 4 months ago. He has nightmares nearly every night and has gradually increased his alcohol use to a pint of vodka per night, consuming it between 4:00 and 11:00 P.M. Some mornings he has little recollection of his activities the prior evening. He was referred to an outpatient practice by his primary care physician.

Initial management should consist of a detailed history of trauma events, current symptoms of PTSD, and presence of other comorbid conditions including depression, history of alcohol use, and drug use. The immediate focus is on safety for the patient and others. Past violent acts and firearm-related behaviors should also be explored. Heavy alcohol use, presence of a firearm, loss of social supports, and suicidal ideation all add to risk. Establishment of rapport and trust may be difficult in an individual who would typically avoid mental health professionals because of career concerns. He will also not likely agree to relinquish his firearm. Because of the potentially depressive effects and disinhibition caused by heavy alcohol use, this is the first area of treatment. He is at risk for complicated withdrawal, so a careful withdrawal history must be obtained and inpatient detoxification should be considered. If he is a safe candidate for outpatient withdrawal, he should be monitored daily for the first week after discontinuation and provided benzodiazepines to ease the symptoms and prevent seizures. Benzodiazepines would also assist with his sleep disturbance acutely, but they should not be used for maintenance treatment. A trial of prazosin should be consid-

ered to reduce the frequency and severity of nightmares, and his sertraline dosage may need to be titrated to ensure optimal response. Cognitive-behavioral therapy should be initiated to examine the accuracy of his perception of threats, establish future goals and direction, identify "triggers" for possible aggressive acts and develop alternative response choices, and reestablish communication and social supports. To assist with abstinence from alcohol and to establish lifestyle changes, referral to a self-help group such as Alcoholics Anonymous may be useful.

Case Example 2

A 42-year-old career law enforcement officer was referred by his employee assistance program provider for an evaluation of possible PTSD and medication treatment. During his career, the officer had seen multiple partners wounded in the line of duty and had been shot at on three occasions. One of these shootings resulted in a minor wound. He had recently been reprimanded for excessive use of physical force during an arrest, when he repeatedly struck a suspected drug dealer with his baton in response to verbally abusive statements. He has loud, verbally abusive fights with his wife, but these have not escalated to physical violence. On his screening questionnaire, he reported "sleep problems" and "anger control issues" as his primary concerns. He is on no medications and has no prior psychiatric treatment.

On the basis of his history of exposures, this patient may have at least some symptoms of PTSD. A careful trauma history should be gathered and a thorough review conducted for symptoms of PTSD, depression, substance use, and violent acts toward self and others. If substance use is not a significant problem it would be best to focus on the patient's stated problems initially to help cement a therapeutic relationship. To reduce the potential for disinhibition in this potentially aggressive patient, non-γ-aminobutyric acid (GABA) medications such as trazodone or ramelteon may be preferable to benzodiazepines or sleep agents such as zolpidem. If significant symptoms of PTSD or depression are present, an SSRI medication may be helpful for those conditions and may also resolve sleep problems. Anger control issues would be best managed with cognitive-behavioral therapy focused on themes and situations likely to cause anger and on developing alternative response patterns for such situations. At least one appointment with the patient's spouse would also be beneficial to obtain collateral information about her observations of the patient in comparison with his recollections. The need for ongoing couples therapy could then also be assessed. Informal peer counseling with another senior officer may also be available through the department. This setting could assist the pa-

tient in further expanding his repertoire of response patterns in anger-provoking situations.

Case Example 3

A 26-year-old married National Guard sergeant had completed two tours in Iraq (20 months total) and had just been released from active duty to resume his civilian employment. He was self-referred to an outpatient clinic with symptoms of intrusion, avoidance, emotional numbing, hypervigilance, and arousal. Like many of his friends from the war, he carries a loaded pistol in his car and sometimes on his person, "because I feel naked and vulnerable without it." He does not hold a concealed weapons permit. The patient's wife is concerned that whenever the patient is around persons who appear to be of Western Asian origin he becomes notably agitated and overly reactive to any movement on their part. At times she has feared that he would draw his pistol and use it. This behavior is worse on days following nightmares with themes pertaining to the war. The patient drank heavily when he first returned from deployment but cut back when his wife threatened to leave him.

The initial assessment should include a detailed trauma history with information specific to each incident and the patient's emotional reactions to each incident. All prior acts of violence by the patient should also be reviewed with regard to the situation, persons involved, and outcomes. Because the patient cannot legally carry a concealed weapon, this behavior should be carefully explored with him in terms of his knowledge of the law and likely consequences of breaking it, the risks and benefits of being armed under such circumstances, the reality of perceived threat conditions, and alternative means of self-protection. As part of weekly cognitive-behavioral sessions, he should review incidents of encounters with persons of Western Asian heritage, the exact nature of the situation, his observations, his appraisal of the situation, alternative explanations of the situation, his behavioral responses, and the outcome of any such interactions. The goal would be to develop a more realistic appraisal of threat in relatively safe civilian settings. His wife should be enlisted as a collaborator in the therapy process to assist in calming the patient in circumstances of perceived threat and to provide her observations of his behavior to the therapist as treatment progresses. One of the SSRI medications may be beneficial in reducing the symptoms of intrusion, avoidance, numbing, and hypervigilance/arousal. Prazosin may also be helpful in reducing the frequency and severity of nightmares.

Case Example 4

A 23-year-old active-duty Army sergeant presented to the clinic at the urging of his wife. She has requested a divorce—and then recanted her

request—on three occasions since his return from a year-long tour in Afghanistan 3 weeks ago. The sergeant notes that he believes his wife "fell in with the wrong crowd" while he was deployed and "stayed out late partying and messing with drugs." She has acknowledged being unfaithful on one occasion. She told the sergeant she quickly broke things off with the man (whom the sergeant knows), but she continues to makes excuses to spend time away from home. The sergeant believes she is either continuing to see this man or is using drugs with her new friends. She usually leaves the house after an argument about household responsibilities. The sergeant reports he has been excessively irritable and angry because she "isn't keeping the house up like she did before I left. She's more concerned about her friends than about me." He further reports that he becomes filled with desperation when he thinks of his wife leaving him. He acknowledges that he has punched walls and kicked a door after her abrupt departures, but he has neither threatened nor assaulted his wife. He explains that she is the "only girl that ever loved me, so I could never hurt her," but he acknowledges that when he thinks of her with that other guy he gets so angry he sees "flashes of me just choking him—or maybe her, and I can't get those out of my head for 10 or 20 minutes until I turn the radio up loud and smoke a cigarette."

He reports initial insomnia and restlessness, particularly when his wife rejects his sexual advances. His sleep is further interrupted by nightmares related to his experience in Afghanistan. He has become socially withdrawn, noting that "I don't want to go out with my wife's friends because they all know what she's been up to while I've been away—and they don't know what I've been through anyway." He denies appetite, weight, energy, or concentration changes or any suicidal thoughts. He notes "I was depressed [at age 11] when my parents divorced. I talked to a counselor every week for 6 months back then, and I took Prozac—but I don't feel that way now." He was raised by his mother after she divorced his physically abusive father. He had very few friends (no close friends and no girlfriends) and preferred to be alone. There is no history of alcohol or illicit substance use. He joined the military immediately after high school and had been successful in special operations training. He married his wife in a courthouse ceremony after a brief courtship, "mostly so that she could get away from her parents and get benefits while I was deployed." During deployment he thought frequently about the life they would have together upon his return. Now he becomes "just so angry inside" when he recognizes that these dreams may not be realized.

This case highlights the potential complications of current psychosocial circumstances and chronic patterns of coping to the management of a potentially violent patient. The soldier reports some symptoms of PTSD, but the feelings of abandonment precipitated by his wife's action, more so than his PTSD symptoms, may prove to be the triggers of interpersonal violence. Further quantification of current PTSD and depressive symptoms is important. However, clarification of his wife's

desires with regard to continuing the marriage, and efforts to help the service member reframe the implications of his wife's abrupt departures (whether they reflect that she merely needs time alone or that she truly wants to end the marriage) may prove more useful in reducing anger. A more detailed exploration of the extent of injurious ideation toward his wife's boyfriend is also warranted. Marital therapy may help both the service member and his spouse clarify their present levels of commitment to the relationship. A past history of response to supportive psychotherapy and SSRIs for depression suggests that medication management and supportive therapy might assist the service member in understanding the intensity of his feelings of abandonment, more effectively expressing his frustrations, and identifying alternative coping mechanisms. Careful monitoring in therapy and the development of rapport may facilitate more intensive care (e.g., day treatment or hospitalization) should the psychosocial situation deteriorate.

Key Points

- In contrast to patients who developed PTSD after a single-event trauma, PTSD patients who underwent repeated threats to life from multiple sources and observed repeated acts of violence toward others over long periods are more likely to show heightened vigilance and possibly aggressive or violent behavior in future settings.
- Further research is clearly necessary on therapeutic interventions targeting combat-related PTSD and PTSD-related violence and aggression. The recommended treatments for PTSD, though supported by reasonable evidence in general, have not been well validated in combat veteran populations—those most likely to feel aggression and display violence as a result of their experiences and illness. Furthermore, no controlled studies exist on the effects of treatments on reducing aggression or violence in patients with PTSD.
- For combat veterans with PTSD, present knowledge and clinical experience suggest that assessment and management of aggression and violence should include the use of pharmacological and psychotherapeutic treatments with demonstrated efficacy in other (i.e., noncombat) PTSD patients.
- Effective management also requires treatment of other comorbid conditions and the development of a hierarchy of problems and interventions.

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