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Clinical Management of Posttraumatic Stress Disorder

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PTSD is a common symptom of childhood abuse, and one that can have a negative impact on health. In this chapter, I provide an overview of treatment techniques for PTSD. Treatment can take place in a general medical setting. But medical management typically occurs alongside psychotherapy. Even if you do not provide psychotherapy, it is helpful to understand these techniques in order to more effectively collaborate with mental health providers. Treatment begins with diagnosis.

Diagnosis of PTSD

As with depression, the first step in management is making a diagnosis. A diagnosis can be difficult to make in a medical setting, but screening questions can help you decide whether a more in-depth evaluation would be helpful.

Initial Screening

Lange, Lange and Cabaltica (2000) recommend using the following screening questions in a primary care medical setting. These questions are for traumatic events in general, but can be useful for adult survivors. They may also reveal that a patient has experienced multiple traumatic events.

- *Have you ever been physically attacked or assaulted?*
- *Have you ever had a severe accident?*
- *Have you ever been in a war or disaster?*

Lange et al. (2000) recommend that you use this screening approach anytime a patient has symptoms of depression or anxiety. Another question they recommend for determining whether a patient has experienced childhood abuse is as follows:

- *Many people continue to think about frightening aspects of their childhood? Do you?*
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While some patients may respond directly to these questions, others may not. Patients may not talk to you about traumatic events for a number of reasons (Blank, 1994). They may feel ashamed or embarrassed, especially if they have experienced sexual abuse or assault. Symptoms of PTSD can also wax and wane. You may be asking at a time when symptoms were not posing a problem for them, or when numbness or avoidance were the most common manifestation. Finally, PTSD can be latent for a period of time. Other symptoms such as job difficulties, substance abuse or problems in relationships, might be present, obscuring symptoms of PTSD. It is often challenging to look beyond the presenting problem to the PTSD that is underlying it.

Diagnostic Criteria for PTSD

Screening questions can indicate that patients have experienced traumatic events. However, a formal diagnosis of PTSD is more exacting. According to *DSM IV TR* Criteria (American Psychiatric Association, 2000), a diagnosis requires a discernible traumatic event, and the victim's response must have included fear, helplessness or horror. (If the event occurred during childhood, this response may have been disorganized or agitated behavior.) In addition, there must be symptoms in each of these clusters: 1) **intrusion**: frequent re-experiencing of the event via nightmares or intrusive thoughts, 2) **avoidance**: numbing or lack of responsiveness to or avoidance of current events that remind patients of their trauma, and 3) **hyperarousal**: persistent symptoms of increased arousal including jumpiness, sleep disturbances or poor concentration. PTSD is acute if the symptoms have been present for less than three months, and chronic if the symptoms have been present for three months or more. The onset of PTSD is considered "delayed" if it occurs six months or more after the initial stressor.

Even if patients do not meet full diagnostic criteria for PTSD, they may have PTSD symptoms that can be troublesome. Indeed, Briere and Elliot note: "although most child sexual abuse victims do not meet full diagnostic criteria for PTSD, more than 80% are reported to have some "post-traumatic" symptoms" (p. 56).

To make a formal diagnosis, you may need to refer patients to a clinician who specializes in trauma work. However, it is possible to make a reasonable hypothesis about whether such follow-up is warranted. Lange et al. (2000) suggest that clinicians use the mnemonic **DREAM** for remembering the diagnostic criteria.

D: is for detachment from the event or a more general emotional numbing.

R: is for re-experiencing the event. This can be through flashbacks, dreams or intrusive thoughts.

E: is for the event itself. Was it sufficient to produce trauma?

A: is for avoidance. This may manifest as avoidance of people, places or things that remind them of the event, or avoiding any thoughts of the event.

M: is for month. Symptoms have lasted for at least one month.

Complex PTSD

Complex PTSD is a relatively new diagnosis that is not part of the DSM IV criteria. Proponents of complex PTSD view this diagnosis as a way to differentiate between patients who have experienced more neutral one-time traumas, such as natural disasters, from patients who have endured prolonged and repeated interpersonal trauma, such as childhood or domestic abuse (van der Kolk, 2002). Complex PTSD also applies to people in slave-labor camps, abusive hostage situations, or religious cults. For a diagnosis of complex PTSD, six of the following symptoms must be present (Blank, 1994, p. 75). Note that many of these symptoms have been described in previous chapters as occurring in survivors of childhood abuse. I have grouped these symptoms by type.

Behaviors: Self-destructive behavior, difficulty modulating sexual involvements, excessive risk taking

Cognitions: Alterations in self-perception including a sense of ineffectiveness (low self-efficacy) or being permanently damaged, suicidal preoccupations, guilt and sense of responsibility (self-blame), shame, a sense that no one can understand, minimizing traumatic effects, despair and hopeless, loss of previously sustaining beliefs

Emotions: Anger

Social: Inability to trust, being revictimized and victimizing others

Patients with complex PTSD often have difficulties in their relationships with their care providers. These patients may over-react to minor frustrations, and appear manipulative, difficult, and ungrateful. When faced with real violations, they may dissociate and become paralyzed (van der Kolk, 2002). This interpersonal style can make them more vulnerable to revictimization. Fortunately, most care providers will not take advantage of this vulnerability. But some, unfortunately, will. Recall Teegen's (1999) findings that 41% of a community sample of female sexual abuse survivors had experienced sexual violence one or more times in relationships, at work or in therapy.

The diagnosis of complex PTSD is not without controversy, however. Some have pointed out that patients who have a diagnosis of complex PTSD have already met criteria for PTSD, and that an additional diagnosis really adds nothing to the picture. It for this reason that complex PTSD was not included in *DSM IV* (Friedman, 2001). In contrast, van der Kolk (2002) states that patients with complex PTSD do not respond to standard treatment for PTSD, and indeed, these standard treatments may be harmful. In addition, these patients often have trouble functioning in everyday life, and may need assistance with developing coping resources so they can process their traumatic pasts *and* cope with their current lives. Van der Kolk (2002) insists that therapists who do not

understand the complexities of complex PTSD may inadvertently retraumatize these patients.

Treatment

Treatment for PTSD involves a combination of patient education, peer counseling, medications and psychotherapy. In their book on psychopharmacology, Preston and Johnson (2001) state that the “treatment of choice” for PTSD is psychotherapy (p. 51). Medications can be useful for managing certain symptoms of PTSD, such as hyperarousal or sleep difficulties, and can be used to treat co-occurring depression, anxiety, or other conditions. Patient education and peer counseling provide support and encourage self-care. The combination of all these modalities provides the best overall care, and each is described below. Treatment approaches described in this chapter are for adults, consistent with the focus of the book. Appendix A is a brief summary of treatment approaches for children with PTSD.

Patient Education

The goal of patient education is to help patients learn the name of their condition, the symptoms, and the rationale for common forms of treatments. Education can be the first component of a treatment plan. It can reassure patients that they are not going “crazy,” which many actually fear, and lets them know that they are not alone. The key elements of patient education are described below (Friedman, 2001).

Normalization

Normalization lets patients know that their symptoms are similar to those experienced by millions of people who have been through traumatic events. This can create a profound sense of relief. Patients learn that there is no stigma to this condition, or it is not a result of their “weakness.” Rather, normalization communicates that PTSD is a common human response to trauma.

Removing Self-blame and Self-Doubt

Many survivors of traumatic events blame themselves for being in harm’s way, and are ashamed that they did not take some kind of heroic steps to avoid the trauma or get out of the dangerous circumstance. Education can help patients realize that they did the best they could under the circumstances and with the information that was available. Patient education can also help patients evaluate how realistic their heroic fantasies are, and that the “failure” to act was due to the overwhelming nature of the event itself.

Correcting Misunderstandings

Patient education, and education of family members and friends, can help people understand the patient’s behaviors in terms of PTSD. Behaviors that seem strange or

upsetting can be explained when seen through the patient's experiences. This can help those in a patient's support network work with, rather than against, treatment goals.

Clinician Credibility

Finally, patient education can help establish clinicians as knowledgeable about PTSD, and that they understand what the patients are experiencing. This helps in enlisting patients' cooperation in treatment, and can facilitate the development of trust.

The Efficacy of Patient Education

At this point, there has been no study of patient education alone in the treatment of PTSD. This is because education is never used alone. It is always an adjunct to other treatment modalities (Friedman, 2001). However, most clinicians agree that it is an important component of any type of therapeutic approach.

Peer Counseling

Peer counseling uses an approach similar to that of Alcoholics Anonymous, in that everyone involved in the group has had personal experience with PTSD, and wants to take more control over their lives. Other examples of peer counseling are battered women's shelters and rape crisis centers. The relationships in the peer group are equalitarian, and there is no authority figure, or professional, who leads the group. Peer counselors often serve as role models for new clients, and demonstrate that it is possible to move beyond traumatic experiences and do something positive with their lives (Friedman, 2001).

The Efficacy of Peer Counseling

Peer counseling has really not been studied for its effectiveness since the very nature of the peer group (open only to those who have had a traumatic experience) tends to limit professional involvement. However, there is anecdotal and clinical information that indicates that these groups can have a positive effect on participants, and can be a useful component of treatment (Friedman, 2001).

Psychotherapy

When people are traumatized, they develop a conditioned response that pairs the traumatic event with certain environment cues (e.g., sights, sounds, smells) and bodily sensations (e.g., pain). Traumatized people also develop beliefs associated with the trauma such as being helpless and vulnerable, and that people in the world are out to harm them. This is known as fear conditioning. In psychotherapy for PTSD, there are two specific goals. The first is to unlearn the conditioned response to cues that trigger PTSD symptoms. The second is to address cognitions that accompany PTSD about themselves and others.

As described earlier, psychotherapy is generally the treatment of choice for people with PTSD. There are many types of psychotherapy available, and most of these require specialized training. However, even if you do not practice psychotherapy, it is helpful to know about the particular methods used to treat PTSD. Two of the most effective individual treatments are cognitive-behavioral therapy, and Eye Movement Desensitization and Reprocessing (EMDR). These techniques are described below.

Cognitive-Behavioral Therapy (CBT)

In the wake of traumatic events, the body and mind become conditioned to respond to certain stimuli in a fearful way, and to maintain maladaptive beliefs. Cognitive-behavioral therapy is designed to counteract conditioned fear responses, and to normalize abnormal thoughts, behaviors and feelings of patients with PTSD. There are several types of CBT, and some are more effective than others. Three popular forms of CBT are exposure therapy, cognitive therapy, and stress-inoculation training. These are described below.

Exposure Therapy. Exposure therapy is specifically designed to alleviate the conditioned emotional response of the traumatic event to traumatic stimuli. After a traumatic event, patients naturally tend to avoid any memories of it, or any stimuli that reminds them of their trauma. However, when patients avoid processing their trauma, this avoidance inhibits their recovery. Exposure therapy forces trauma survivors to confront these memories, thereby lessening their hold on patients (Foa & Cahill, 2002).

Exposure therapy begins when patients are asked to imagine the traumatic event. Patients who have experienced multiple or continuous traumatic events (such as childhood abuse) are asked to imagine the worst event that they can remember completely. Patients are asked to describe what happened, and their thoughts and feelings that occurred during the trauma repeatedly in a single session (Foa & Cahill, 2002). During their narratives, patients are asked to report their level of distress every ten minutes. Initially, most patients are highly distressed. However, as they repeat their stories, their levels of distress tends to decrease. If treatment has been successful, then patients can confront their traumatic pasts without triggering PTSD symptoms, especially intrusive thoughts or hyperarousal. It also helps patients not generalize their anxiety to other situations that are actually safe, but appear similar to the dangerous situation they were in.

Exposure therapy helps patients master their fears, and counters the belief that they are weak or incompetent (Foa & Cahill, 2002). This form of treatment is highly effective, and has had higher rates of success than supportive counseling (Foa & Cahill, 2002; Friedman, 2001). However, van der Kolk (2002) cautions that too much exposure to traumatic memories can backfire, and actually precipitate PTSD symptoms such as hyperarousal and sensitization. It is important that exposure to the traumatic event not re-activate full-blown symptoms of “pain, dissociation, and helplessness....[but] instead should help patients to be fully present in the here and now without the residual dissociation and/or hyperarousal characteristic of PTSD” (p. 149).

Cognitive Therapy. As described in earlier chapters, cognitive therapy addresses distortions in thinking. Adult survivors often see the world as a dangerous place and see themselves as helpless (Foa & Cahill, 2002; Friedman, 2001). Unfortunately, these beliefs can become a self-fulfilling prophecy; a survivor who feels helpless is at increased risk for repeated victimization. Also, mistrustful beliefs about others can disrupt social relationships and have a negative impact on health.

The goal of cognitive therapy is to help patients identify these automatic thoughts, and to replace them with more accurate ones (Foa & Cahill, 2002). This form of therapy is also highly effective in reducing symptoms of PTSD (Friedman, 2001).

Stress-Inoculation Training (SIT). Stress-inoculation training uses a combination of methods to help survivors cope with anxiety, trauma-related stimuli, and threatening situations. SIT is based on social-learning theory, which states that traumatic events create behavioral, social and cognitive fear responses. SIT uses classical conditioning techniques to overcome the pairing of fear with neutral stimuli, and teach techniques that can reduce fear (Foa & Cahill, 2002). It includes relaxation techniques, biofeedback, cognitive restructuring, and assertiveness training to help patients deal more effectively in social relationships (Friedman, 2001).

While relaxation techniques alone have not been very effective in dealing with PTSD symptoms, they are helpful in combination with these other techniques. Stress inoculation training is as effective as exposure therapy for reducing PTSD symptoms, and these improvements last over time (Friedman, 2001).

Eye Movement Desensitization and Reprocessing (EMDR)

EMDR is another treatment that has proven effective for many patients. It is based on hypothesis that saccadic eye movements can reprogram the brain, and therefore can be used to help alleviate the emotional impact of trauma. (Saccadic eye movements are those quick eye movements that jump from one fixation point to another.)

During EMDR treatment, patients imagine a traumatic memory, or any negative emotions associated with that memory. Then patients are asked to articulate a belief that is incompatible with their previous memory (e.g., on their personal worth). While patients are remembering this event, they are asked use their eyes to follow the clinician's fingers that are making rapid movements. During treatment, patients are asked to rate the strength of both the traumatic memory and the counteracting positive beliefs (Friedman, 2001).

Studies have demonstrated that this method of treatment is effective, and has superior results to psychodynamic or supportive therapies. In examining the results of a number of different studies, 50% to 70% of patients no longer met criteria for PTSD after receiving EMDR treatment. In contrast, only 20% to 50% of patients who received supportive therapy no longer met PTSD criteria (Friedman, 2001). However, studies on the efficacy of EMDR have some methodological limitations including non-blind

evaluations, lack of pre-treatment diagnosis via a valid measure, and small sample sizes. Nevertheless, initial data suggest that this is a promising approach for the treatment of chronic PTSD (Foa & Cahill, 2002).

Van der Kolk (2002) states that EMDR has several important advantages over exposure therapy in the treatment of PTSD. First, EMDR is easier to “dose” than exposure therapy, in that patients are asked to indicate the moment they have an emotional response to the memory, and “stay there” to process the memory using eye movements. Because the patient controls the amount of exposure, they don’t get the extremes of arousal that are possible with exposure therapy. The second advantage is that patients do not have to describe their thoughts to clinicians, but are only asked to report on changes in emotional arousal and somatic sensations. This can be especially helpful if traumatic memories are accompanied by guilt and shame, which they frequently are. Finally, EMDR can allow treatment to proceed in cases where patients have no words, or cannot articulate what happened to them.

Interestingly, the exact mechanism for how these changes are brought about remains unclear. The eye movements don’t appear to have any impact on results when treatment is offered with or without eye movements (Friedman, 2001; van der Kolk, 2002). Some have hypothesized that the reason this treatment works has to do with its impact on underlying cognitions, making it a form of cognitive-behavioral therapy. Proponents of EMDR strongly disagree (Friedman, 2001).

The Efficacy of Psychotherapy

Overall, it appears that CBT is the most effective treatment for PTSD. Of the forms of cognitive behavioral therapy, exposure therapy has the best empirical support (Foa & Cahill, 2002). In one study that directly compared CBT to EMDR, patients assigned to the CBT group had significantly fewer symptoms post-treatment than patients assigned to EMDR. Those who received CBT were almost three times as likely to have recovered from PTSD at the 3-month follow-up (Deville & Spence, 1999). However, EMDR is also effective in treating all three clusters of symptoms and can be a useful addition to treatment regimens (Friedman, 2001). Stress-inoculation training has also proven effective for the treatment of rape-related PTSD. Interestingly, combining psychotherapy treatments does not increase their effectiveness and may actually lessen the effectiveness of the individual treatment (Foa & Cahill, 2002). Exposure therapy appears to be most effective for those with low levels of functioning before beginning treatment, whereas stress-inoculation training is helpful for patients with high levels of anxiety (Foa & Cahill, 2002). However, van der Kolk (2002) cautions that, particularly in the case of complex PTSD, there are still many questions about what is the optimal treatment. He states that what appears to be most important is to give patients a sense of mastery that will allow them to live in the present rather than the past, and to no longer be held captive by their memories.

Medications

Medications are another form of treatment for PTSD, and can be an important adjunct to psychotherapy, peer support, and patient education. The types of medications that are helpful include antidepressants, benzodiazepines, adrenergic agents, and anticonvulsants. These medications are often used to control not only symptoms of PTSD, but also comorbid conditions such as depression, anxiety and substance abuse.

As useful as these medications are, however, empirical support for their use is limited. Mellman (2002) describes a number of issues that make clinical research difficult to conduct with PTSD patients. One problem is that research designs often exclude patients with comorbid conditions. But since PTSD tends to be highly comorbid, patients that end up in clinical trials often bear little resemblance to patients you are likely to see in clinical practice. In addition, patients in clinical trials are often taking only one medication, whereas it is common to combine medications in clinical practice. And there is very little research that documents the efficacy of combined medications. Finally, there is little research that documents the efficacy, or provides clinical guidelines for combining medication and psychotherapy, even though the combination of medication and psychotherapy is one of the most common forms of treatment. Are these effective together? Does the combination detract from either form of treatment? At what point in the treatment should medications be introduced? These are questions that have not yet been addressed by controlled clinical trials. Nor have there been empirical studies that can guide treatment decisions about how to combine these treatments, and in what order or sequence.

Nevertheless, use of medications can be helpful. In the absence of empirically based guidelines, three clinical criteria can be used to make judgments about when to use medications (Mellman, 2002). First, there should be an explicit rationale for the use of each medication. Second, medications can augment psychotherapy when there has been an unacceptable level of response to psychotherapy alone, or when symptoms persist after psychotherapy. Third, medications may also be tried when comorbid symptoms are so prominent that they are limiting the effectiveness of psychotherapy, or keeping patients from participating in psychotherapy at all. However, Mellman (2002) cautions that medications cannot be presented to patients in such a way that they appear as an afterthought because patients are less likely to comply if they view medications as simply add-ons. Below are the most common types of medications used to treat PTSD.

Antidepressants

Antidepressants are a key part of treatment of PTSD in that they address PTSD symptoms, but also co-morbid depression. The Selective Serotonin Reuptake Inhibitors (SSRIs) appear to be the most effective, but other types can also be helpful.

Serotonin Reuptake Inhibitors (SSRIs). SSRIs address all three classes of symptoms: intrusive thoughts, avoidance and numbing, and hyperarousal (Friedman,

2001). Of the SSRIs, fluoxetine (Prozac) and sertraline (Zoloft) have been most successful, although higher doses may be required for the treatment of PTSD than for the treatment of depression (Preston & Johnson, 2001).

SSRIs also treat depression, panic disorder, and obsessive-compulsive disorder (Friedman, 2001). For patients with co-morbid alcoholism, sertraline reduces the amount of alcohol consumed. Fluvoxamine (Luvox) can help with both obsessional thoughts and insomnia (Lange et al., 2000).

These medications have some significant side effects that patients often find intolerable including insomnia, restlessness, nausea, decreased appetite, nervousness and anxiety. Some of the most troubling symptoms are the sexual side effects. These include decreased libido, sexual dysfunction, and anorgasmia (Friedman, 2001). Some of these side effects can be managed with the addition of other medications to the regimen. A common class of medication that gets combined with SSRIs are the SARIs (see below).

Serotonin-2 Antagonists/Reuptake Inhibitors (SARIs). Trazadone (Desyrel) and nefazadone (Serzone) are SARIs, which when administered along side an SSRI, boost the actions of these drugs, and reverses medication-induced insomnia. Both trazadone and nefazadone are sedative and may be taken at bedtime (Bezchilibnyk-Butler & Jeffries, 1999). Trazadone suppresses REM sleep. This acts to reduce the number of nightmares patients experience (Lange et al., 2000). In contrast, nefazadone increases REM sleep and improves overall sleep quality (Bezchilibnyk-Butler & Jeffries, 1999). Both of these drugs may be too sedating for some patients, however (Friedman, 2001).

Tricyclic Antidepressants (TCAs). According to Sutherland and Davidson (1994), the tricyclic antidepressants imipramine (Tofranil), desipramine (Norpramin), and amitriptyline (Elavil) have an established track record of efficacy in the treatment of PTSD. However, Lange et al. (2000) note that these medications have minimal effects on arousal or avoidance symptoms, and therefore recommend the SSRIs over the tricyclics.

TCAs reduce intrusive thoughts and recollections. They also treat any co-occurring depression, produce an overall improvement in symptoms, and may help with panic symptoms. However, their side effects (such as dry mouth, rapid pulse, blurred vision, constipation, and daytime sedation) may lead to low compliance with treatment (Friedman, 2001).

Monoamine Oxidase Inhibitors (MAOIs). MAOIs are another class of antidepressants that includes phenelzine (Nardil) and tranylcypromine (Parnate). These medications are helpful in managing symptoms of reexperiencing, avoidance and insomnia. They can also reduce the number of nightmares that patients experience. However, these medications are not widely used in the U.S. because they have strict dietary limitations. Patients cannot consume anything with tyramine, which is found in many aged foods including cheese and wine, or any alcohol or illegal drugs. MAOIs can also have dangerous interactions with other prescription medications including SSRIs.

Given the high rate of co-morbid substance abuse in patients with PTSD, these medications are often contraindicated for this population. But they may be tried if other medications have failed to bring relief in symptoms (Friedman, 2001; Lange et al., 2000).

Benzodiazepines

Benzodiazepines are a class of medications that include alprazolam (Xanax) and clonazepam (Klonopin). They have a long history of use among patients with PTSD. These work mostly on symptoms of hyperarousal and are effective anti-anxiety medications (Friedman, 2001). They are also helpful for managing insomnia and irritability.

However, there are some problems associated with their use. Most concerning is their addictive nature and the potential for abuse (Lange et al., 2000). They are contraindicated in patients with a history of substance abuse, which can be a problem in a population of adult survivors of childhood abuse. These medications can also exacerbate the symptoms of depression (Friedman, 2001), and can cause excessive daytime sedation, which has been related to automobile accidents, problems with attention, concentration and short-term memory (Gale & Oakley-Browne, 2002). Moreover, according to a recent review for the *British Medical Journal* (Bisson, 2002), there have been no randomized clinical trials documenting their effectiveness in the treatment of PTSD. They should be used with caution.

Adrenergic Agents

Adrenergic agents work by blocking norepinephrine receptors and include clonidine (Catapres), guanfacine (Tenex), and propranolol (Inderal). They are frequently prescribed to control hypertension, but in patients with PTSD, they also control symptoms of intrusive memories and hyperarousal. Clonidine is effective in controlling anxiety, panic disorders, ADHD symptoms, and agitation. Propranolol can be useful in controlling rage, irritability and aggression, and guanfacine is useful for ADHD (Bezchilbnzyk-Butler & Jeffries, 1999).

These medications also have some significant side effects. They may cause dangerous decreases in blood pressure. Propranolol may also produce depressive symptoms, especially psychomotor slowing, so they are contraindicated in patients with comorbid depression (Friedman, 2001).

Anticonvulsants

Anticonvulsants are another category of medications that are used in the treatment of PTSD. They do not have empirical support from randomized clinical trials testing their efficacy with PTSD (Bisson, 2002), but do have a history of clinical use. The two most commonly used are carbamazepine (Tegretol) and valproate (Depakote). Both are effective in managing symptoms of bipolar affective disorder, but also help with PTSD symptoms. Carbamazepine is effective for intrusive memories and hyperarousal, and

valproate helps with avoidance, numbing, and hyperarousal (Friedman, 2001). Anticonvulsants are also useful in the treatment of chronic pain syndromes such as trigeminal neuralgia and neuropathic pain (Bezchilibnyk-Butler & Jeffries, 1999), and may be helpful with other types of co-occurring pain.

Carbamazepine can have a number of serious side effects that can include drowsiness, headache, dizziness, weight gain, and adverse hematologic effects (including aplastic anemia and leukopenia). It can lower thyroxine levels and raise HDL cholesterol. It can also interact with several medications prescribed for PTSD including SSRIs, nefazodone and trazodone, and propranolol (Bezchilibnyk-Butler & Jeffries, 1999).

Valproate also has side effects including weight gain, elevation of hepatic transaminase levels, and menstrual disturbances. It is contraindicated in patients with liver dysfunction. And it also interacts with several medications including tricyclics, SSRIs (fluoxetine), clonazepam, and aspirin (Bezchilibnyk-Butler & Jeffries, 1999).

Phases of Treatment with Medications

Management of symptoms of PTSD with medications has several phases that begin with selecting the appropriate medication regimen, and continue as long as there are symptoms. These phases are described below.

Selection of a Medication Regimen. When first considering medications for a patient with PTSD, Lange et al. (2000) and Friedman (2001) recommend starting with a trial of SSRIs, since they address the broadest range of symptoms. If insomnia is a problem, trazodone can be added to the regimen. Hyperarousal can be treated with clonidine. The combination of the three medications (SSRIs, trazodone, and clonidine) can alleviate the majority of symptoms for many patients with PTSD.

For patients who cannot tolerate SSRIs, Friedman (2001) recommends a trial of tricyclics (TCAs) since these are safer to administer than MAOIs. Beyond these recommendations, guidelines are unclear as to which medications might be most helpful. In this case, it is helpful to consider comorbid symptoms. He makes recommendations for five types of symptoms. These are listed below.

- **For irritability, aggressiveness, mood lability, impulsivity or suicidal behavior.** SSRIs are most effective for these types of symptoms.
- **For hyperreactivity or excessive arousal.** SSRIs supplemented with clonidine, guanfacine, or propranolol are often helpful. With these adrenergic medications, you will know within two weeks whether they are going to be effective. Most medications take at least 8 weeks before their effectiveness can be evaluated.

- **For aggression, lability or impulsivity.** The anticonvulsants are often helpful.
- **For comorbid major depression.** Use an SSRI, TCA or MAOI. Avoid propranolol since it can produce symptoms of depression.
- **For co-morbid substance abuse.** Sertraline has been shown to reduce both symptoms of PTSD and alcohol consumption. Avoid MAOIs since there are dangerous interactions between these medications and common substances of abuse including alcohol and cocaine.

Initial Management with Medications. After deciding on a medication regimen, the next goal is stabilization (Sutherland & Davidson, 1994). PTSD symptoms do not remit easily, and it can be 8 to 10 weeks before patients notice any difference in symptoms. During this stage, frequent contact should be made with the patient, and an anti-anxiety medication may be temporarily added to reduce symptoms.

Maintenance. The next phase is maintenance. This stage can last anywhere from one year to indefinitely. The need for changes in the medication regimen may vary by whether patients are in psychotherapy, and how they are dealing with traumatic material. Exploring new areas of their traumatic pasts may lead to an exacerbation in symptoms. In this case, an increased dose of medication is required to keep symptoms under control. By reducing the symptoms that patients are experiencing, they can continue in therapy working through these issues.

Long-term Stabilization. Once symptoms have been stabilized long-term, you might consider the discontinuation of medication. This should not be done while the patient is still undergoing psychotherapy and uncovering traumatic material unless the patient demonstrates an ability to handle these thoughts and feelings without medication. A slow taper is the most appropriate method for reducing or discontinuing medications. This gives you a chance to monitor for the return of PTSD or symptoms of drug withdrawal (Sutherland & Davidson, 1994).

If the patient starts experiencing symptoms again, medication can be restarted or continued. Even when patients have completely weaned off of medications, they may require a brief course when they face a significant life stressor such as an illness or death in the family, birth of a child, or a major social disruption such as a move or marital break-up.

Summary of Treatment for PTSD

PTSD is a complex web of physiological, behavioral, social and cognitive sequelae. Treatment approaches mirror this complexity. As with many other aspects of health and wellness, a holistic approach is likely to yield the best results. And you are more likely to be successful if you work with a team that can provide social support,

patient education, psychotherapy, life-skills training, and medications. While chronic PTSD can be difficult to treat, particularly if it is related to long-term and severe abuse, it is possible to improve symptoms and help survivors regain their lost sense of efficacy, safety, competence and control.

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