MANAGEMENT OF POSTTRAUMATIC STRESS DISORDER (PTSD)

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***Rezumat**: Tulburarea de stres posttraumatic (TSPT) este o tulburare de anxietate cronică care apare după o experiență extrem de traumatizantă (viol, violență, asalt, tortură, răpire, atac terorist, închisoare, accidente care amenință viața, dezastre naturale) asociazăteamă, neajutorarea sau groaza și, uneori, dezorganizarea sau comportamentul agitat, datorită flashback-urilor, coșmarurilor și amintirii evenimentului traumatic. Ea are efecte devastatoare asupra bunăstării și funcționarii pacienților mai mult decât alte tulburări psihiatrice, datorită ratelor ridicate de comportament suicidar. Managementul în aceste cazuri are trei aspecte: educația (vorbind despre eveniment), sprijinul psihosocial (consiliere, psihoterapie) și tratamentul psihofarmacologic (SSRI, TCA, IMAO). Scopurile tratamentului sunt reducerea simptomelor, invaliditatea, îmbunătățirea calității vieții, reducerea stresului și a comorbidității.*
***cuvinte cheie**:tulburări anxioase, risc suicidar ,reacție la stres,management*

***Summary:** Posttraumatic stress disorder (PTSD) is a chronic anxiety disorder that occurs after an extremely traumatic experience (rape, violence, assault, torture, kidnapping, terrorist attack, prison, life threatening accidents, natural disasters) with long lasting symptoms such as intensefear, helplessness or horror and sometimes disorganization or agitated behavior, due to flashbacks, nightmares, and recollection of the traumatic event. It has devastating effects on wellbeing and function of the patients more than other psychiatric disorders, because of its high rates of suicidal behavior. Management in these cases counts on three aspects: education(talking about the event), psychosocial support (counseling, psychotherapy) and psychopharmacologic treatment(SSRI, TCAs, IMAOs,). The goals of treatment are to reduce symptoms, disability, improve quality of life, reduce stress and comorbidity.*
***key words**: anxiety disorder, suicidal risk, stress reaction, management*

Posttraumatic stress disorder (PTSD) is a chronic anxiety disorder with a high lifetime prevalence rate of 7.8% (10.4% for women and 5% for men). Its devastating effect on the wellbeing and functioning is even greater than that of other well-known psychiatric disorders such as major depressive disorder and obsessive-compulsive disorder, contributing to absenteeism, increased medical utilization, profound personal and economic loss and significant suffering. The profound disabling effect of post-traumatic stress disorder is exemplified by its high rates of suicidal behavior. PTSD patients are six times more likely to make suicide attempts than the general population, with a rate of 20%, comparable with prevalence rates seen in major depression. Its rate of suicide attempts is greater than that of all other anxiety disorders.

Posttraumatic stress disorder (PTSD) occurs only after exposure to an extremely traumatic experience. After this type of traumatic experience, some people develop symptoms that last a long time. If a person who has experienced an extremely traumatic event develops enough symptoms that long enough, a diagnosis of posttraumatic stress disorder can be made. Not everyone exposed to even the most extreme traumatic events develops post-traumatic stress disorder. Those who do develop post-traumatic stress disorder often respond to the event with intense fear, helplessness or horror and sometimes with disorganized or agitated behavior.

The traumas that cause post-traumatic stress disorder are severe and usually outside the range of common human experience. After such traumatic experiences, which would produce a strong reaction in most individuals, some develop an acute stress disorder and a smaller number progress from acute stress disorder to posttraumatic stress disorder(1).

The traumatic events that can lead to post traumatic stress disorder involve interpersonal violence, such as rape, assault, torture, being kidnapped, being taken hostage, terrorist attack, incarceration as a prisoner of war or in a concentration camp; life threatening accidents, such as automobile or industrial accidents; disasters, such as fires and hurricanes, or being diagnosed with a life threatening illness. Interpersonal violence is more likely to cause post-traumatic stress disorder than are accidents and natural disasters.

Post-traumatic stress disorder is also more likely to occur in people who are directly exposed to these events than those who witness or hear about traumatic events(2).

After exposure to an extremely traumatic experience, some individuals reexperience the traumatic event in recollections, flashbacks, nightmares or after encountering reminders of the event. They may also develop emotional numbing and avoid situation that trigger unpleasant memories(1).

The management of post-traumatic stress disorder consists of three aspects: education, psychosocial support and/or treatment and psychopharmacologic treatment.

For the primary care, in the management of post-traumatic stress disorder the following clinical points are important:

1. In the first day after exposure to trauma, educate victims about 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 one or two counseling sessions to deal with their distress and create a sense of safety and observe them to evaluate the need for specialized interventions.
3. For consecutive 4 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 nonbenzodiazepines hypnotics.
4. At three weeks, if there are no clinical improvements (ex. patient is extremely distressed or is not relating to family or friends) prescribe drug therapy for PTSD or refer the patient to mental health professional.
5. SSRIs (selective serotonin reuptake inhibitors) are generally the most appropriate choice of first-line medication for post-traumatic stress disorder.
6. Benzodiazepines are generally ineffective in treating post-traumatic stress disorder 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.

The goals of treatment for post-traumatic stress disorder are to reduce core symptoms, reduce disability, improve quality of life, improve resilience to stress and reduce comorbidity. Both psychotherapy and pharmacotherapy have been used to achieve these goals. Successful outcomes depend crucially on a therapeutic alliance between the patient and the clinician.

Some forms of psychotherapy are necessary in the treatment of posttraumatic stress disorder (PTSD). Crisis intervention that take place shortly after the traumatic event is effective in reducing immediate stress and possibly it prevent chronic or delayed responses(3).

A variety of cognitive and behavioral techniques have gained increasing popularity and validation in the treatment of post-traumatic stress disorder. People involved in traumatic events frequently develop phobias or phobic anxiety related to or associated with these situations. When a phobic anxiety or avoidance is associated with post-traumatic stress disorder, systematic desensitization or graded exposure has found to be effective. Prolonged exposure, if tolerated by a patient, can also be useful and has been reported to be successfully in the treatment of a group of Vietnam War veterans (Fairbank and Keane 1982).

Cognitive behavioral treatments are effective in post-traumatic stress disorder, in 9 to 12 sessions, and include exposure therapy, stress inoculation training and cognitive therapy. Prolonged exposure therapy involves asking the patient to repeatedly relive the trauma in a safe, therapeutic setting to make it easier for him or her to process the event. The aim of exposure treatments for post-traumatic stress disorder is facilitating the processing of the trauma, which is thought to be impaired in survivors with chronic post-traumatic stress disorder.

Prolonged exposure treatment is designed to be conducted in 9 to 12 sessions of 90 minutes each and the patients confront the situations, places or things that remind them of the traumatic experience until they no longer induce a fear response.

Exposure treatment incorporates imaginal exposure (IE) in which the patient relives the trauma in his or her imagination and describe it out loud in the present tense in the therapy session.

Other forms of exposure include in vivo exposure, in which patients confront realistically safe situations, places, or objects repeatedly that are reminders of the trauma until they no longer elicit such strong emotions(4). Prolonged exposure is effective in reducing generalized fear to no trauma-related stimuli, and in enhancing the patient's sense of competence and self-control. Unfortunately, because of the intensely painful emotions that arise in prolonged exposure, the treatment can have a high drop-out rate(5).

Relaxation techniques produce the beneficial psychological results of reducing motor tension. Progressive muscle relaxation technique involves contracting and relaxing various muscle groups to induce the relaxation response(3).

Other psychotherapeutic treatment is eye movement desensitization and reprocessing. This technique involves the patient's imagining a traumatic scene and focusing on the accompanying cognitive and physical responses while the patient tracks the therapist's two fingers moving across the patient's visual field. This is repeated until discomfort decreases, at which point the patient is instructed to generate a more adaptive though and to associate it with the scene while moving his or her eyes. It is a relatively new technique that has been applied to the treatment of trauma-related pathology in the past decade. In the literature, its efficacy continues to be controversy, although eye movement desensitization and reprocessing has been found to be superior to relaxation in treating PTSD (Carlson et al, 1998)(3).

The current pharmacotherapeutic options are (tab. I): tricyclic antidepressants (TCAs), monoamine oxidase inhibitors (IMAOs), selective serotonin reuptake inhibitors (SSRIs), newer antidepressants, anticonvulsants and benzodiazepines.

Until about a decade ago, most reports on the pharmacotherapy of post-traumatic stress disorder involved the use of TCAs. Double-blind trials support the efficacy of the amitriptyline and imipramine. On the other hand, desipramine is clinically ineffective in post-traumatic stress disorder. The data for TCAs in post-traumatic stress disorder conflict with most of the studies only suggesting a modest effect.

The Food and Drug Administration (FDA) has approved two medications for the treatment of post-traumatic stress disorder: the selective serotonin reuptake inhibitors (SSRIs) (sertraline and paroxetine). These medications have proven to be effective in improving the symptoms of post-traumatic stress disorder, with sustained benefit over time when administered for 9 months and more than 1 year. The dosage required to improve varies greatly. Many patients require doses in the upper ranges of recommended doses (100 mg to 200 mg of sertraline and 30 mg to 50 mg of paroxetine). If the patient cannot tolerate either of the approved drugs, clinicians may try an alternative SSRI. Fluoxetine is not approved in post-traumatic stress disorder, but it has been shown to be effective in controlling symptoms in several placebo-controlled trials(5).

Connor et al reported the results of a small pilot study of six outpatients with severe post-traumatic stress disorder who were treated with mirtazapine, up to 45 mg/day for 8 weeks. Fifty percent of the sample showed improvement of 50% or more from baseline. Only one case of post-traumatic stress disorder with comorbid major depression treated with venlafaxine has been reported in 1998 from Hammer and Frueh. This patient showed substantial improvement with venlafaxine 150 mg/day and further improvement was observed after an increase of the dose up to 225 mg/day(2,5).

For augmentation therapy, benzodiazepines may be a useful adjunct to SSRIs to treat persistent and prominent symptoms. A large study of veterans with post-traumatic stress disorder and comorbid substance abuse found that benzodiazepine use did not have negative effect on long-term outcomes.

Mood stabilizers/anticonvulsants are frequently used as augmentation therapy, but only limited data are available to demonstrate the efficacy of lithium,valproic acid and carbamazepine. Small trials have suggested that topiramate and lamotrigine may be effective for post-traumatic stress disorder.

Second generation or atypical antipsychotics may have a role in the treatment of post-traumatic stress disorder for patients with psychotic symptoms or prominent agitation or who re-experience symptoms. Small controlled studies of olanzapine and risperidone suggest that antipsychotics may have a role in the treatment of post-traumatic stress disorder. Quetiapine may be effective in treating severe insomnia in post-traumatic stress disorder patients who are refractory to other hypnotic agents(5).

There are no trials comparing psychotherapy to medication for adults with post-traumatic stress disorder and moreover there are no controlled trials examining combination treatments(4).

Table I – Antidepressant Medication
(Doses are for depression but serve as a rough guide for PTSD)

Generic Name	Usual starting daily dose	Usual effective daily dose	Side Effects		
			Anticholinergic		
			sedation	dry mouth, blurred vision, constipation, difficulty urinating, impaired memory	nausea
Selective serotonin reuptake inhibitors (SSRIs)					
Citalopram	20	20-60	Low	Low	medium

Escitalopram	10	10-20	Low	Low	medium
Fluoxetine	20	20-80	Low	Low	medium
Fluvoxamine	50	100-300	Low	Low	medium
Paroxetine	20	20-50	Low	Low	medium
Sertraline	50	50-200	Low	Low	medium
Novel					
Bupropion	200	300-450	Low	Low	Medium
Duloxetine	40-60	60	Low	Low	Medium
Mirtazapine	15	15-45	High	Medium	Low
Nefazodone	200	300-600	Medium	Low	Medium
Trazodone	150	150-400	Very high	Low	Medium
Venlafaxine	75	75-375	Low	Low	Medium
Tricyclics (TCAs)					
Amitriptyline	50-75	100-300	Very high	Very high	Low
Clomipramine	25	100-250	Medium	High	Low
Desipramine	50	100-300	Low	Medium	Low
Doxepin	50-75	100-300	Very high	High	Light
Imipramine	50-75	100-300	High	High	Low
Nortriptyline	25-50	50-150	Medium	Medium	Low
Tetracyclic					
Maprotiline	50-75	100-225	Very high	High	Low
Monoamine oxidase inhibitors (MAOIs)					
Isocarboxazid	30	30	Low	Low	Low
Phenelzine	30	45-90	Low	Low	Low
Tranylcypromine	20	30-60	Low	Low	Low
Selegiline	6	6-12	Low	Low	Low

CONCLUSIONS

Based on the current level of clinical evidence, SSRIs are recommended as the first-line drug therapy for PTSD. These drugs are most effective in meeting the treatment goals; they reduce symptoms and disability, improve functionality and resilience to stress and treat comorbid depression and anxiety. Medication should start with a low dose of SSRI and it 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. For mild PTSD should be used psychotherapy, and for moderate to severe PTSD a combination of drug therapy and psychotherapy should be used.

In practice, many clinicians combine psychotherapy and medication, particularly for the most severely ill patients. Treatment with medication may facilitate participation in a trauma-focused psychotherapy, which requires motivation to overcome avoidance and a willingness to practice techniques designed to reduce anxiety.

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