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CLINICAL AND THERAPEUTIC MANAGEMENT OF ACUTE STRESS DISORDER

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Acute stress is an anxiety disorder due to an exposure to a traumatic or stressful event which implies a specific reaction.

Clinical features are variable, depending on: type of personality, coping mechanisms, socioeconomic or professional factors, co-morbidities.

Therapeutic management involves pharmacotherapy (antidepressants are the most common), psychotherapy or an association between both in selected cases.

Keywords: acute stress, anxiety, pharmacotherapy, psychotherapy

Acute stress disorder may be defined as an anxiety disorder due to an exposure to a traumatic or stressful event (e.g., a serious injury, witnessing an act of violence, etc.).
Briere J. and Spinazzola J. [1] have studied and evaluated the psychological responses associated with exposure to a single, multiple, or extended traumatic stressors. They have described several principal symptom clusters that can be found separately, overlapped, or intersected.
Among these we mention:

- altered and failing coping abilities;
- mood disturbance;
- exacerbated avoidance symptoms;
- somatic distress;
- acute stress disorder.

Reactions to overwhelming trauma can be viewed as a continuum on an axis which at one end has a single response of an adult with normal psychosomatic development, and at the other one presents multiple, extended and overreacting response, involving a significant amount of stigma and shame, of an individual who, for a variety of reasons, is more vulnerable to stress.

Modern studies have shown that the distress or the disorder caused by a stressful event is the result of multiple interacting factors, such as:

a. traumatizing experiences throughout life that determine ”psychological aftermath” and are liable to develop other complex psychological reactions in similar conditions [2];
b. severe posttraumatic responses explained by individual variables, (e.g.: sympathetic nervous hyperactivity), by the presence of depressive and anxious states or personality disorders [3], by alcohol or drug abuse [4], by socio-professional factors: inadequate social support [5], insufficient financial resources [6];
c. stigma associated with various traumatic experiences [7];
d. complex posttraumatic reactions that reflect the variety of biological, psychological, cultural, and social factors that modulate the negative impact of the stressful experience. Chung et al. [8] have analyzed the complex relationship among personality traits, coping mechanisms and maladjustment, characterized by PTSD, has been conceptualized in terms of three models: • the mediational model suggests that personality factors determine particular coping strategies; • the additive model claims that coping abilities and personality make independent and unique contributions to generating or maintaining maladjustment; • the interactive model suggests that personality factors interact with coping.

Focusing on war veterans and on victims of natural disasters, that developed acute stress disorder, studies have shown a predominance of antisocial disorder and dependent-avoidant disorder that are in many cases associated with vulnerability and hyper sensibility of sympathetic nervous system.

On survivors of an aircraft crash has been noticed a high-level of death anxiety, whose gravity correlates with the visual impact of the stressor and with life experience until the possible death moment.

Diagnostic criteria for acute stress disorder include:

A. *Exposure* to a traumatic event in various ways, such as: • direct participation to trauma; experiencing the distressing event; • witnessing the traumatic event that involved a threat to the physical or mental integrity of self or others.

B. *The response involves fear*, helplessness, horror.

C. *Diminished senses or the presence* of three or more of the following dissociative symptoms: • Significant decline of emotional responsiveness up to a subjective sense of affection numbing (emotional anesthesia); • A reduction in self-awareness of the surroundings (e.g., “being in a daze”); • Derealization, a sense of detachment towards the situation, sensitivity disorders; the person perceives reality as a dream (oneiroid state); • Depersonalization, a dissociative symptom in which the patient feels that his or her body is unreal, is →

dissolving; • Inability to recall one or more aspects of the trauma.

D. *Re-experiencing the symptoms that occurred during the stressful experience* in one or more of the following ways: • Recurrent thoughts, images or memories of the trauma; • Repeated vivid dreams or nightmares on themes that recall the traumatic event; • Presence of actions or feelings that resemble the ones experienced during trauma (flashback), visual or auditory hallucinations (voices), and delusional beliefs about what the individual has heard or seen at that time; • Emotional reliving of physiological sensations or of traumatic experiences (the individual walks down the street where the event occurred or goes through the same temporal coordinates).

E. *Avoidance of thoughts, places, conversation topics,* activities or people that arouse recollections of the trauma

F. *The presence of hyper-vigilance* and other marked symptoms of anxiety: • Difficulty falling or staying asleep; • Irritability crisis; • Difficulty concentrating; • Motor restlessness.

G. Marked symptoms like fear or anxiety, that cause clinically significant distress or interfere with important areas of socio-professional functioning.

Acute stress disorder is differentiated from post traumatic stress disorder in three ways:
1. The time frame of developing symptoms is shorter;
2. The period that symptoms last is from less than 2 days up to 4 weeks;
3. At least three symptoms indicating disso-ciation.

Modern studies have shown that biological treatment (pharmacotherapy and psychotherapy single or associated own) is effective in treating acute stress disorder.
The first-line intervention in the treatment strategy of the acute stress disorder consists in antidepressants, in particular selective serotonin reuptake inhibitors (SSRIs), as well as antidepressants with dual action: serotonin-norepinephrine reuptake inhibitors (SNRIs). From the first group we mention: citalopram, fluvoxamine, fluoxetine, paroxetine, sertraline. Venlafaxine ER, which proved very effective in treating acute stress disorder symptoms, belongs to the second group of antidepressants. Several clinical trials have been conducted to compare the two types of antidepressants and to establish the response rates, which are the following:

- 54-62% for paroxetine (20-40 mg/day);
- 53-60% for sertraline (50-200 mg/day);
- 78% for venlafaxine ER (37.5-300 mg/day) [9].

The treatment strategy of the acute stress disorder also includes mood-stabilizing drugs, like valproic acids (depakine), especially when the therapeutic response is partial or when irritability and anger prevails.
Treatment is imperative in the following circumstances:
• Significant daily symptoms; • Significant socio-occupational dysfunction; • Severe insomnia; • Comorbid physical or psychiatric disorders (depressive disorder); • Persistence of symptoms after psychotherapy. If symptoms persist less than three months, medical treatment should be continued for at least 6-12 months. When symptoms have lasted for more than three months, medication should be continued 1-2 years. Long-term treatment might be necessary for those with intense or enduring exposure or symptoms.

The decision of recommending a certain treatment is based on medical and psychiatric history, on past treatments, drug interactions and potential side effects.

Cognitive behavioral therapy is a major component of the integrated treatment plan. It focuses on correcting painful and intrusive patterns and thoughts by cognitive restructuring. Cognitive behavioral therapy allows the therapist to determine what might aggravate the symptoms. Similar with the way it works in the case of depression and anxiety disorders, this type of therapy, helps patients better control their feelings, teaches them effective techniques to better adjust to the stressful events. Regardless the type of psychotherapy that is used, the goal is to build up the patient's self-esteem, and to restore a sense of control, thus calming down rage and anger. Psychotherapy sessions aim at developing the abilities of expressing emotions, retelling the traumatic event to reduce emotional burden and finding efficient strategies to cope with stressful events.

Another technique that is being used is repeatedly and gradually exposing the patient to the stressful trigger and to various situations that produce fear, until anxiety reduces significantly. Another type of exposure is recalling the stressful situation, thus re-experiencing it until fear subsides. Shapiro Francine developed the eye movement desensitization and processing technique (EMDR) associated with recollections of the stressful situation.

The combination of psychotherapy and phar-macotherapy prevents relapses and it is particularly useful in physical or psychiatric co-morbidities.

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