

Psychological Intervention and Physical Treatment of Patients with Post Traumatic Syndrome Disorder

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Abstract: Post Traumatic Syndrome Disorder (PTSD) develops after a person's exposure to a frightening event that caused or could have caused physical damage. The symptoms start to appear during the first three months after the traumatic event and must last more than a month and be, severe enough to interfere with social life and the ability to function at the work place in order to be considered a PTSD. This paper presents the results of psychological intervention and physical treatment had on patients with PTSD in the Rehabilitation Clinics.

Keywords: post traumatic syndrome disorder, psychological intervention, physical treatment, rehabilitation

Date of Submission: 15-10-2019

Date of Acceptance: 31-10-2019

I. Introduction

The PTSD disorder develops in people who have been through a shocking experience. The trauma plays a major role in the possible development of mental health disturbance. The importance of PTSD was officially admitted by its inclusion in the Diagnostic and statistical manual of mental disorders (3rd edition, American Psychiatric Association, 1980)¹.

After and during a traumatic situation it is natural to feel afraid. A person who is involved in a traumatic event suffers split-second changes of thoughts and body reactions.

It is the typical "fight-or-flight" reaction of keeping oneself safe, either defending oneself or avoiding the situation. Many of those who had suffered a trauma recover without a professional help, still experiencing a range of reactions. Some people continue to have problems such as stress and fear even in situations that present no danger and these are the ones that can be diagnosed with PTSD².

This syndrome can be short termed (the acute form), or long-termed (the chronic form). The symptoms usually begin in the first three months after the traumatic event and must last more than a month and be severe enough to interfere with social life and the ability to be functional at the work place to be considered a PTSD³.

II. Diagnostic Criteria

According to the Diagnostic and statistical manual of mental disorders 4th ed. (American Psychiatric Association, 2000) the diagnostic criteria for PTSD are⁴:

" A. The person has been exposed to a traumatic event in which both of the following were present:

1. The person experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others.
2. The person's response involved intense fear, helplessness, or horror. Note: In children, this may be expressed instead by disorganized or agitated behaviour.

B. The traumatic event is persistently re-experienced in one (or more) of the following ways:

1. Recurrent and intrusive distressing recollections of the event, including images, thoughts, or perceptions. Note: In young children, repetitive play may occur in which themes or aspects of the trauma are expressed.
2. Recurrent distressing dreams of the event. Note: In children, there may be frightening dreams without recognizable content.
3. Acting or feeling as if the traumatic event were recurring (includes a sense of reliving the experience, illusions, hallucinations, and dissociative flashback episodes, including those that occur on awakening or when intoxicated). Note: In young children, trauma-specific re-enactment may occur.
4. Intense psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event.
5. Physiological reactivity on exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event.

C. Persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness (not present before the trauma), as indicated by three (or more) of the following:

1. Efforts to avoid thoughts, feelings, or conversations associated with the trauma
 2. Efforts to avoid activities, places, or people that arouse recollections of the trauma
 3. Inability to recall an important aspect of the trauma
 4. Markedly diminished interest or participation in significant activities
 5. Feeling of detachment or estrangement from others
 6. Restricted range of affect (e.g., unable to have loving feelings)
 7. Sense of foreshortened future (e.g., does not expect to have a career, marriage, children or a normal life span)
- D. Persistent symptoms of increased arousal (not present before the trauma), as indicated by two (or more) of the following:
1. Difficulty falling or staying asleep
 2. Irritability or outbursts of anger
 3. Difficulty concentrating
 4. Hypervigilance
 5. Exaggerated startle response
- E. Duration of the disturbance (symptoms in Criteria B, C, and D) is more than one month.
- F. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.”
- In the Classification of Mental and Behavioural Disorders ICD-10 2017/18 the PTSD diagnosis code is F.43.1⁵.

III. An Illustrative Study Case for PTSD

The case is of T.S., a female patient, 49 years old, an economist. After suffering a car accident, she was referred to the Recovery Institute specifically for medical recovery program for motor deficit and for psychological intervention.

The patient suffered a polytrauma: multiple bilateral costal fractures, bilateral pulmonary congestion, left clavicle fracture, fracture of the right femur (operated), fracture of the right tibial plateau (operated) and left thoracic vertebrae, and was operated for these.

At the time of the admission the patient accused mixed chest pains and roulette pain of intensity 7 on a scale from 0 to 10, paraesthesia at the anvil level of intensity 6 on a scale from 0 to 10, mechanical knee pain at the right knee of intensity 4 on a scale from 0 to 10.

There were no significant medical history data prior to the polytrauma.

Regarding data concerning the family environment, the family type was organized, consisting of husband and wife, and two children. She lived with her husband and the children and the household consisted of a house with two floors and garden. The husband presented her as an ambitious person, intelligent, very active and sociable, a devoted mother and wife.

As collateral family medical history, it can be mentioned that both her parents, mother and father, had arterial hypertension (AHT).

IV. Assessment

The PTSD proper assessment was made by using the observation method and the interview method, face to face with the patient, asking about the symptoms⁶. Informations about the traumatic event and about the patient were also obtained from family members, therefore it was indicated to interview them separately also. A semi-structured interview was the technique used to evaluate the disorder and at first all the details related to the car accident and patient's emotions related to it were obtained.

All additional data obtained from family members, rescue team or the police officers were useful for the evaluation. This helped evaluating the severity of the physical injuries, emotional impact and other damages.

In the interview, there are three important questions and answering yes to all of them leads to a PTSD diagnostic. The first refers to having nightmares and flashbacks, the second is about desirability in driving again a car and the third is about having any difficulties in traveling by car⁷. The answers reveal unwanted thoughts and the re-experiencing of trauma and emotions like anxiety, fear and helplessness and the attempt of reducing associated distress avoiding situations like being a driver or a passenger in a car. Also of great importance are the questions related to the nictemeral rhythm, difficulty concentrating, patient ability of planning future, relax and enjoy past hobbies and capacity of maintain a job and social relations⁸.

V. The trauma history

The patient affirmed that she had been involved in a frontal collision car accident (she was driving the car). The other car's driver lost control of the driving direction entering from the other driving side of the road and in collision with the patient's car. After the collision, the patient was incarcerated until the rescue teams arrived at the accident scene. It took the emergency personnel 20 minutes to extract her from the car. The other's

car driver, also a woman, did not survive the impact and died. The patient saw the rescue team efforts to resuscitate the other driver.

VI. The main complains

The patient affirmed that she had persistent worries, sleeping problems, gastrointestinal discomfort, palpitations, self- incrimination problems and helplessness feelings.

VII. Symptoms and dysfunctions

The communication was difficult at the beginning of the interview. The patient easily started to cry, but was cooperative, accepted to answer questions and to tell what happened and how she was feeling.

She claimed that since the traumatic event she had been feeling helpless, had persistent worry, was blaming herself at some extend and had a sense of total control loss (emotional symptoms)⁹.

Another range of symptoms was represented by muscular tension, sleeping problems, gastrointestinal discomfort and palpitations (physiological symptoms).

Furthermore, the patient developed the conviction that if she would drive a car a new accident would take place (cognitive symptoms)¹⁰.

Also, the patient avoided to make even small physical efforts, involvement in activities that she used to like, to make any trip, to accept friends` or work colleagues` visits (to avoid answering questions related to the event), to go to sleep because of the flash-back memories (nightmares in which she relived the accident) and declared that she did not want to go to work anymore and would never drive a car again (behavioural symptoms)¹¹.

VIII. Intrusive thoughts

The patient presented: self -incrimination thoughts` I am to blame for leaving home that day`,` if I was not driving that day maybe the other woman was still alive`; thoughts of despair `life is not good anymore`; thoughts about herself being a burden for family members `I am of no use now for my husband and kids`¹².

IX. General consideration

The medical team`s intervention aimed to work at the same time on psychological recovery as well as on physical recovery.

Making a physical recovery plan presumes knowing exactly the patients` parameters. The most important is to differentiate between post-traumatic stress, neurological disorders or arthritic problems¹³. Also, important parameters in making a recovery plan are patient`s age, general physical condition and profession. In this case the recovery doctors and physiotherapists made intervention plans to improve progressively the functions until full recovery.

The first step was to raise the patient in orthostatic position. The supine position comes with the possibility of occurrence of multiple medical posttraumatic and postoperatively complications like edema, muscular hypotrophy, thrombosis or joint stiffness. This can be avoided starting to make active movements and isometric contractions for a short time at first, joint immobilizations in the functional position and early articular mobilizations¹⁴.

However, only raising the patient is not enough. The general physiotherapeutic recovery steps start 24 hours after surgery and consist in respiratory gymnastics and isometric contractions. After 48 hours, the patient starts passive and active movements and after 14 days the active movements with resistance.

All recovery programs are unique, adapted to patient`s particularities and contain respiratory exercises that are a way of active rest.

The psychological intervention plan aimed to re-establish the patients` mental balance and the operating efficiency prior to the accident¹⁵.

To reduce posttraumatic stress, a series of interventions can be applied that have different purposes, one of these is the anxiety management training combined with relaxation techniques that helps reducing hyperarousal symptoms¹⁶.

This is followed by the exposure to imagination method, in which the patient is retelling in detail the event, the repetition helping reduce the distress associated (decreasing the intensity at 2 on a scale from 0 to 10) and eliminating intrusive memories (like flash-backs, nightmares). The exposure in vivo helps the patient remove the avoidance of accessing memories and engaging in previous avoided activities¹⁷.

If necessary, also fury management training can be involved helping eliminate the outbursts of fury.

The most important are the cognitive restructuring, developmental analysis and the training for developing problem-solving skills. They help eliminate the sentiment of guilt, anxiety symptoms and acquiring abilities that can prevent relapse¹⁸.

Finally, the patient had to review her life, plan daily activities and identify sources of meaning of life¹⁹.

X. Recovery Plan for the patient

After evaluating the patient, the first step was to assess whether she fitted in the posttraumatic syndrome disorder diagnostic by using the criteria of the Diagnostic and statistical manual of mental disorders 4th ed.⁴.

The patient was exposed to a traumatic event in which she was confronted with the death of another person implicated in the event and which resulted in herself undergoing several surgeries.

The event was re-experienced, the patient had flash-back memories of the traumatic event; recurrent and intrusive distressing recollection of the event associated with nightmares and sleeping problems; physiological and emotional reactivity; the sentiment of narrowed future and persistent avoidance of any stimuli that could be associated with the trauma²⁰. The duration of the perturbation was longer than one month and caused a significant clinical social and professional deterioration.

The data synthesis indicated: on axis, I post traumatic syndrome disorder, on axis II no personality disorders, on axis III multiple bilateral costal fractures, bilateral pulmonary congestion, left clavicle fracture, fracture of the right femur (operated), fracture of the right tibial plateau (operated) and left thoracic volte operated and on axis IV psychosocial non-integration.

The intervention plan stretched over 18 sessions. At the end of the therapeutic intervention the patient no longer had nightmares and sleep problems, the physiological and emotional reactivity diminished, some of the symptoms of anxiety persisted but without significance on DSM IV, her social skills improved, was planning to return to work, her anxiety as a passenger was reduced, however she was still avoiding to drive alone the car²¹.

XI. Conclusion

Even though constant investments in improving the traffic condition are being made, still vehicle accidents happen. According to the data from the General Inspectorate of Romanian Police, 8300 persons were severely injured in car accidents in 2016. This is an increase of 12% compared to data from 2015.

Many of the people involved in car accidents develop PTSD and it is important to diagnose them as soon as possible to prevent possible long-term or permanent impairments.

As could be seen from the case presented above, improvement and finally recovery are possible, given early diagnosis and proper disciplinary treatment that addresses all the aspects of the physical and mental injuries.

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Horia Lăzărescu. "Psychological Intervention and Physical Treatment of Patients with Post Traumatic Syndrome Disorder." IOSR Journal of Dental and Medical Sciences (IOSR-JDMS), vol. 18, no. 10, 2019, pp 14-18.