

THE EFFECTIVENESS OF TREATING A TRAFFIC ACCIDENT TRAUMA WITH EMDR AFTER FAILED PSYCHOPHARMACOLOGICAL TREATMENT - A CASE REPORT

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INTRODUCTION

Car accident victims can suffer from an acute stress reaction and post-traumatic stress disorder.

In the therapeutic method of desensitization and reprocessing with eye movements (Eye Movements Desensitizing Reprocessing - EMDR), trauma with a large "T" includes events that a person perceives as a life-threatening. These events are so saturated, stressful, that they can overcome our usual capacity to fight (Herman 1992).

They result in intense fear, extreme feelings of helplessness, and complete loss of control. Symptoms of post-traumatic stress disorder (PTSD) manifest in two types of simultaneous and diametrically opposed behaviors. In one type, the traumatized person cannot escape their trauma, they are forced to get rid of the original event through intrusive symptoms such as flashback episodes, nightmares, panic attacks, and obsessive thoughts. In the second, they, again, must not approach trauma: they are completely isolated from the recollection of trauma by avoiding symptoms and anything that can be associated with the event, such as social isolation, emotional stiffness, and substance dependence. Victims of trauma also have physiological reactions such as insomnia, hypervigilance, and a tendency to be easily intimidated by any recollection of an event, such as a single sound or touch (Shapiro 1997).

In the approach to the treatment of PTSD, physicians most often opt for psychopharmacotherapy by combining antidepressants such as selective serotonin reuptake inhibitors, anxiolytics, mood stabilizers, hypnotics, and atypical antipsychotics (Hasanović et al. 2011, 2013).

The relative short-term efficacy and long-term benefits of pharmacological and psychotherapeutic interventions have rarely been studied for posttraumatic stress disorder (PTSD).

Different types of psychological therapy have been proposed in the treatment of trauma, including exposure therapy, cognitive therapy, psychodynamic therapy, and EMDR. EMDR is currently an effective psychological

treatment, recognized and recommended as the first line of trauma treatment in a number of international guides (Boccia et al. 2015).

In Bosnia and Herzegovina, education for mental health workers EMDR was organized in 2009, and in 2014 Association of EMDR Therapists in Bosnia and Herzegovina was established (Hasanović et al. 2018, 2021).

Accordingly, our capacities to use EMDR in everyday treatment of traumatized patients became a reality (Ališahović-Gelo & Hasanović 2018, Hrvic & Hasanović 2018, Imširović & Hasanović 2018, Kokanović & Hasanović 2018, Pašalić & Hasanović 2018, Omeragić & Hasanović 2018, Smajić-Hodžić & Hasanović 2018, Siručić & Hasanović 2018).

The aim is to show the case of a patient who responded favorably to EMDR therapy but did not respond favorably to pharmacotherapy and superficial supportive treatment

CASE REPORT

The patient arrives for the first time in 2016, at the age of 38, due to the symptoms that appeared after the traffic accident at the beginning of 2013. She was healthy until the accident.

She is the firstborn child in her family. She is married, has no children. Marital relations are harmonious. During her pregnancy, she moved to Sarajevo from a small town because her husband got a job, she is unemployed. She is a second-year college student which she neglected due to the disturbances she has (she is studying in another city and has a fear of driving).

The patient comes for advice because she has bodily symptoms, such as dizziness, numbing of legs, head throbbing, and insomnia with nightmarish dreams along with irritability. She had a fear of driving.

She has been treated by pharmacotherapy since 2013, and with superficial support psychotherapy. She took anti-depressives and anxiolytics for about a year. She did not feel better. An acquaintance advised her that she becomes pregnant because that will help her in

overcoming her hardships – she does. She became pregnant soon after her therapy was proscribed

During pregnancy, she felt a bit better, but she still had nightmare dreams in which she kept losing her child. In the eighth month of pregnancy, she gave birth before her term due to the child having a malformation. The baby was immediately operated on and unfortunately, died on the fifth day after birth.

After the explanation of EMDR therapy and informed consent, scaling is done in order to assess her condition: Beck's anxiety and depression scale and the Mississippi questionnaire, and dissociation assessment. The scales showed a high degree of anxiety, moderate depression and symptoms of PTSD.

The patient accepted EMDR therapy.

In the preparation phase, we set goals: we wanted to free her from the fear of driving, and to free her from feelings of sadness and helplessness due to child loss.

In the first phase, we decided to work on the traffic accident. We set positive and negative cognition, assessed the validity of true cognition (VoC) as well as the degree of anxiety (SUDS) and emotions and bodily sensations.

We did EMDR therapy following protocol.

During the first session, she experienced pronounced somatic symptoms in the form of dizziness, nausea and the urge to vomit, so she stopped the process twice. The session ended as incomplete because her picture of the accident did not change.

After the second session, the color of the image turned gray and nothing else changed. About 15 days passed between the sessions.

During the third session, things started to change because we changed the picture. After the session was over, she felt much better. SUDS was 2 and VoC 6. That session ended as incomplete. After a month, we saw each other again. After checking the image, the validity of the positive cognition, and the body scan, there was no disturbance. Installation was done.

The patient then came for check-ups. She is now more relaxed when driving, and there is almost no fear. She is more careful. We planned to work on the loss of her child, but unfavorable life events (her husband's problems at work in which she was invested) did not allow her to work on another trauma until a few days ago. Further treatment is planned.

DISCUSSION

This case report shows the effectiveness of EMDR treatment in relation to pharmacological treatment that did not give the desired results in the treatment of symptoms that occurred after the car accident. The completed, evaluated scales confirmed the symptoms of Post-traumatic stress disorder, severe anxiety, and moderate depression.

Based on Evidence-based treatment and based on the results of scientific research, EMDR psychotherapeutic treatment, alongside cognitive-behavioral therapy, is one of the two effective treatments in the treatment of PTSD. The high efficacy of EMDR therapy was confirmed in a sample of 80 people with Posttraumatic Stress Syndrome (Wilson et al. 1995, Wolpe & Abrams 1991). Statistically, a significantly higher efficacy of EMDR therapy was demonstrated compared to pharmacological treatment with fluoxetine, which was maintained on the follow-up control in the case of PTSD treatment. (2007). Van der Kolk et al. (2007) found that EMDR psychotherapy intervention was more successful than pharmacotherapy in achieving a sustained reduction in PTSD and depression symptoms, but this benefit arose primarily in trauma survivors. At a 6-month follow-up, 75.0% of adults, compared with 33.3% of subjects receiving EMDR, achieved asymptomatic end-stage function compared to no subjects in the fluoxetine group. This study supports the effectiveness of short-term EMDR treatment to achieve significant and continuous reductions in PTSD and depression in most adult-induced trauma victims.

CONCLUSION

EMDR therapy reduced the patient's symptoms of trauma caused by a car accident. The patient became more functional and more relaxed in driving. But due to the complete resolution of the symptomatology, more work is needed regarding another traumatic event. Another "T", the loss of a child.

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Elvira Ališahović-Gelo: conception and design of the manuscript and interpretation of data, literature searches and analyses, clinical evaluations, manuscript preparation and writing the paper;

Mevludin Hasanović: made substantial contributions to conception and design, participated in revising the article and gave final approval of the version to be submitted.

References

1. Ališahović-Gelo E & Hasanović M: *Self Experience of EMDR Therapy Efficacy – A Case Report. Psychiatr Danub 2018; 30(Suppl 5):260-261. PMID: 30095808*
2. Boccia M, Piccardi L, Cordellieri P, Giariglia C, Giannini AM: *EMDR therapy for PTSD after motor vehicle*

- accidents: meta-analytic evidence for specific treatment. *Frontiers in Human Neuroscience* 2015; 9:213
3. Hasanović M, Pajević I, Zukić S, Hamidović J, Kuldija A, Delić A & Kravić N: Psychopharmacotherapy characteristics of alcoholics treated no Psychiatry Department Tuzla from 01.01.2005 to 31.12.2009 with brain computerized tomography. *European Psychiatry* 2011; 25(suppl 1). 19th European Congress of Psychiatry. 12-15 March, 2011 - Vienna, Austria
 4. Hasanović M, Sinanović O, Pajević I, Avdibegović E & Frančičković T: Quality of life of war veterans with posttraumatic stress disorder in Bosnia-Herzegovina. *European Psychiatry* 2013; 28(suppl. 1):1258
 5. Hasanović M, Morgan S, Oakley S, Richman S, Šabanović Š & Pajević I: Development of EMDR in Bosnia and Herzegovina – From an idea to the first EMDR conference. *Psychiatr Danub* 2018; 30(Suppl. 5):243-248
 6. Hasanović M, Morgan S, Oakley S, Richman S, Omeragić I, Siručić N, Kokanović I, Imširović F, Hrvic Dž, Stajić D & Oakley Z: Development of EMDR Therapy in Bosnia and Herzegovina – Education by Supervision to Accreditation. *Psychiatr Danub* 2021; 33(Suppl. 1):4-12
 7. Herman JL: *Trauma i oporavak*. Sarajevo: Svjetlost, 1997
 8. Hrvic D & Hasanović M: EMDR Treatment Posttraumatic Stress Disorder Caused by Multiple War Trauma - A Case Report. *Psychiatr Danub* 2018; 30(Suppl 5):315-319. PMID: 30095820)
 9. Imširović F & Hasanović M: Application of EMDR in the Treatment of Sexual Dysfunctionality after Hysterectomy - A Case Report. *Psychiatr Danub* 2018; 30(Suppl 5):297-301. PMID: 30095812
 10. Kokanović I & Hasanović M: Would the Well-timed use of of EMDR Therapy in the School System save the Mental Health of of Youth. *Psychiatr Danub* 2018; 30(Suppl 5):265-270. PMID: 30095810
 11. Omeragić I & Hasanović M: EMDR Treatment of Early Trauma Activated by Present Events - A Case Report. *Psychiatr Danub* 2018; 30(Suppl 5):286-290. PMID:30095814
 12. Pašalić M & Hasanović M: Treating Childbirth Trauma with EMDR - A Case Report. *Psychiatr Danub* 2018; 30(Suppl 5):265-270. PMID: 30095810
 13. Shapiro F: *The Breakthrough Therapy for Overcoming Anxiety, Stress and Trauma*. New York: Basic Books, 1977
 14. Siručić N & Hasanović M: Application of EMDR Therapy in the Treatment of Complicated Patient in Family Medicine - A Case Report. *Psychiatr Danub* 2018; 30(Suppl 5):320-325. PMID: 30095821
 15. Smajić-Hodžić L & Hasanović M: The Efficiency of EMDR Therapy in Treating Early Multiple Traumas - A Case Report. *Psychiatr Danub* 2018; 30(Suppl 5):302-306. (Indexed in CC and PubMed PMID: 30095817)
 16. Trlin I & Hasanović M: EMDR Treatment of a 10 Years Old Boy Who Suffered from Continuous Overnight Waking - A Case Report. *Psychiatr Danub* 2018; 30(Suppl 5):276-281. PMID: 30095811
 17. van der Kolk BA, Spinazzola J, Blaustein ME, Hopper JW, Hopper EK, Korn DL, Simpson WB: A randomized clinical trial of eye movement desensitization and reprocessing (EMDR), fluoxetine, and pill placebo in the treatment of posttraumatic stress disorder: treatment effects and long-term maintenance. *J Clin Psychiatry* 2007; 68:37-46. PubMed PMID:17284128
 18. Wilson SA, Becker LA & Tinker RH: Eye movement desensitization and reprocessing (EMDR) treatment for psychologically traumatized individuals. *Journal of Consulting and Clinical Psychology* 1995; 63:928-937
 19. Wolpe J & Abrams J: Posttraumatic stress disorder overcome by eye movement desensitization: A case report. *Journal of Behavior therapy and Experimental Psychiatry* 1991; 22:39-43

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