

EMDR treatment for anorexia nervosa triggered by early traumatic experiences

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Abstract

Background: The case study presents the use of EMDR therapy in the treatment of early traumatic experiences in an adolescent girl with a diagnosis of Anorexia Nervosa. Help was initially sought after the patient began rapidly losing weight.

Aims: The aim of the study is to show the use of EMDR as a specific treatment for trauma, perceived as a trigger for Anorexia Nervosa. The treatment aim was to accept the body changes and return to a weight which enabled optimal functioning in everyday life.

Case report: The patient was a 17 year old female, attending the third grade of high school and living with her mother and sister. The treatment was conducted in several phases. Phase one involved psychological support and psychoeducation. Phase two consisted of teaching techniques, such as diaphragmic breathing, visualization, relaxation, practicing of positive self-talk, assertive communication skills, anger management and the development of self-awareness. In phase three, EMDR therapy was used in order to process a traumatic experience identified as a major trigger for her eating disorder. There was a change in the patient's perception of her mother from someone that she adored into "a monster". This led to a distorted perception of her body based on the assumption "I am only safe in a child's body". EMDR therapy activates adaptive neurophysiological pathways, which in turn facilitate functional information processing and the reconsolidation of

the dysfunctionally stored memories. This leads to a reduction in anxiety and an improvement in symptomatology. In addition, the treatment facilitates the development of more adaptive insights and the change of beliefs and behaviours previously connected with the experienced traumas. The standard EMDR protocol consisting of eight phases was used. In just two sessions the patient developed a considerable awareness of, and change in, her emotional reactions connected to the trauma, as well as the cognitive and emotional integration of the traumatic experiences. The treatment was not completed. The patient reported feeling an improvement in functioning and did not attend offered appointments, a decision supported by her mother.

Conclusions: Based on this case study it is concluded that EMDR can actively contribute to the alleviation of pathological symptoms of an eating disorder that includes an early traumatic experience. For reliable and general conclusions about the role of EMDR in the treatment of eating disorder, it is necessary to examine the effectiveness of its use in controlled studies.

Keywords: *EMDR, anorexia, early trauma*

Sažetak

Uvod: U prikazu slučaja opisana je primjena terapije desenzitizacije i reprocresiranja uz pomoć pokreta očiju - EMDR-a (eng. Eye Movement Desensitization and Reprocessing - EMDR), u tretmanu rane traume kod adolescentice kojoj je dijagnosticirana Anoreksija nervoza. Nakon što je djevojčica počela rapidno gubiti na kilaži potražena je stručna pomoć.

Cilj: Ovim prikazom se nastojao pokazati slučaj specifične prirode tretmana rane traume kao okidača Anoreksije Nervoze kod adolescentice, a čiji je cilj bio prihvatanje promjena na tijelu uz vraćanje kilaže koja je optimalna za neometano funkcioniranje u svakodnevnom životu.

Prikaz slučaja: Klijentica je u dobi od 17 godina, pohađa 3. razred gimnazije, živi s majkom i sestrom. Tretman se sastojao od nekoliko dijelova. Prvi se odnosio na psihološki suport i psioh edukaciju. Drugi je uključivao tehnike iz kognitivno - bihevioralne terapije kao što su kognitivna restrukturacija, tehnike abdominalnog disanja, vizualizacije, relaksacije, uvježbavanje pozitivnog samogovora, asertivnog komuniciranja, savladavanja ljutnje, i tehnike usredotočene svjesnosti. U trećem je dijelu primijenjena EMDR terapija usmjerena na prorađivanje traumatskog iskustva koje je identificirano kao jedan od značajnih okidača poremećaja hranjenja kod djevojčice. Ekstremno je promijenilo njezinu percepciju majke kao predmeta njezinog obožavanja u majku "čudovište" od kojeg se imala potrebu zaštititi, a time značajno utjecalo i na stvaranje iskrivljene percepcije slike svoga tijela i to po principu "jedino u tijelu djeteta sam sigurna". Primijenjen je standardni EMDR protokol koji se sastoji od osam faza. S obzirom da EMDR pristup omogućava aktivaciju adaptivnih neurofizioloških mehanizama koji obezbjeđuju funkcionalniju obradu informacija preko procesa rekonsolidacije memorije vezane za stresogena iskustva (dysfunkcionalno pohranjena memorija), u tretmanu se osim reduciranja anksioznosti i simptomatskog poboljšanja opravdano očekivalo postizanje značajnih uvida, te izmjene uvjerenja i ponašanja vezanih za proživljenu traumu. U samo dvije seanse došlo je do značajnog prepoznavanja i mijenjanja emocija vezanih za traumu, kao i racionalno-emocionalne integracije traumatskog iskustva. Tretman nije završen. Jedan od razloga za to je da je djevojčica osjećala poboljšanje u funkcioniranju i nije se odazivala na dogovorene susrete što je podržala i njena majka.

Zaključci: Na temelju aktualnog prikaza slučaja zaključuje se da EMDR može aktivno doprinijeti ublažavanju psihopatološke simptomatike poremećaja hranjenja koji u podlozi ima rano traumatsko iskustvo. Za pouzdane i generalne zaključke o stvarnoj ulozi EMDR-a u tretmanu ovog poremećaja neophodno je ispitivati efikasnost njegove primjene u kontroliranim studijama.

Ključne riječi: EMDR, anoreksija, rana trauma

Introduction

During the last twenty years, the incidence and prevalence of eating disorders has significantly increased, with authors suggesting that Anorexia Nervosa is among the most severe. Anorexia Nervosa is characterized by maintaining a body weight at, or below, 15% of its normal value for the person's height and age, and an intense fear of gaining weight. There are two Anorexia subtypes: binge-eating/purging, and restricting. The binge-eating/purging subtype includes episodes of vomiting or cleansing (vomiting, use of laxatives and diuretics), while the restricting subtype has no such episodes (Žaje Franulović, 2012).

Numerous studies indicate the connection of pathological disorders and, on one hand, the history of traumatic life events, and on the other, dysfunctional attachment (Hund and Espelage, 2005; Racine and Wildes, 2015). The results of previous research in this area have linked the presence of eating disorders with traumatic experiences of childhood abuse (Carter, Bewell, Blackmore and Woodside, 2006; Kong and Berstein, 2009).

According to the Adaptive Information Processing (AIP) Model, on which Eye Movement Desensitization and Reprocessing (EMDR) therapy is based, in the case of most pathological phenomena, disturbing traumatic memories, or so-called pathogenic memories, are stored in isolated memory networks. Accordingly, the childhood experiences can be coded together with survival mechanisms and include feelings of danger that are not applicable to adults. Thus, the past events retain their power, as they are not appropriately and timely assimilated into adaptive networks (Solomon and Shapiro, 2008). According to Van der Kolk and Saporta (1999), such childhood memories remain "frozen" or stored in a dysfunctional way in the memory of an individual. It is therefore said that the body retains these traumatic memories, that is, the body "remembers" the trauma. It follows that the processing of such memories can eliminate pathological symptoms (Hase, Balmaceda, Ostacoli, Liebermann and Hofmann, 2017).

The EMDR treatment stimulates the reprocessing of information and the desensitization of anxiety related to stress-based experiences through visual, tactile or audible bilateral stimulation. It enables the activation of adaptive neurophysiological mechanisms that enable more adaptive processing of information through the reconsolidation process of dysfunctionally stored traumatic memories. In addition to reducing anxiety, EMDR allows new insights, and a change of beliefs, emotions and behaviour (Shapiro, 1999).

In a study conducted in Italy on twenty adolescents and young adults (aged 15 to 25), an evaluation of Anorexia Nervosa treatment was undertaken by comparing the effectiveness of Cognitive Behavioural Therapy and EMDR on participants' traumatic memories. The focus was on their attachment. The EMDR treatment included a protocol specific to the eating disorder. In both groups of participants, a significant improvement was noted in relation to their condition prior to the treatment. However, it was demonstrated that

those who underwent EMDR treatment were able to actively process traumatic memories that brought together family dynamics and dysfunctional eating behaviours. This is exactly what is highlighted as a key factor in the successful treatment of eating disorders. It emphasizes that the emotional processing of unresolved attachment issues allows for more efficient modification of the rigidity associated with a need for control, characteristic of people with Anorexia Nervosa (Zaccagnino, Civilloti, Cussino, Callerame and Fernandez, 2017). Also, the effectiveness of the EMDR approach was confirmed by the findings obtained in the presentation of a case of an adolescent with diagnosed Anorexia Nervosa. In this case, positive outcomes were presented both in terms of nutrition and body weight of the patient, as well as in attachment style, connection with self, emotional regulation, and general changes in everyday social life (Zaccagnino, Cussino, Callerame, Civilloti and Fernandez, 2017).

This paper presents the case of a 17-year-old girl diagnosed with Anorexia Nervosa. The EMDR therapeutic procedure presents the detailed description of the identification of the traumatic event which was the basis for the current dysfunction in the patient.

Case study

The 17 year old patient lives with her mother and older sister. Her parents divorced before she was born and she does not maintain contact with her father. No identified family psychiatric history. She attends the third grade of high school with excellent grades, and also Music School with the same success.

First presentation to a clinical psychologist was at her mother's initiative due to a significant reduction in meals. The patient denied the presence of any symptoms or disorders in daily functioning. Psychological assessment established the presence of symptoms indicative of eating and mood disorders. She was referred for a psychiatric assessment, where she was diagnosed with Anorexia Nervosa (restricting type), depressive mood disorder and Trichotillomania. After that, the patient was hospitalized for a month in the Republic of Croatia in a specialized institution dealing with eating disorders. Although she expressly denied the presence of Anorexia Nervosa, during the hospitalization she co-operated and her body weight was satisfactory enough to be discharged, and she was referred for outpatient treatment with the diagnosis Anorexia Nervosa.

At the start of the treatment, the patient was aged fifteen and a half years and regularly came to meetings for a period of 1.5 years. She was offered psychological support, psycho-education, and psychological counselling for her and her mother. She was introduced to exercises of abdominal breathing, progressive muscle relaxation, and the techniques of visualization, assertive communication, overcoming. She had tasks such as keeping a food diary, tracking automatic thoughts, and practicing homework tasks. In the course of the treatment, the technique of cognitive restructuring was also used to

help her question her irrational beliefs and misinterpretations by monitoring and identifying negative automatic thoughts and beliefs, especially in relation to the basic negative image of herself. She was involved in Art Therapy and a nutritional course. She attended fortnightly psychiatric monitoring, and treatment (antidepressants) were prescribed, and met a clinical psychologist (who followed and worked with her from the beginning to the end of the treatment, including EMDR) every week for the first 4 months, and then 2 times a month, and Art Therapy once or twice a month. The initial evaluation before the EMDR treatment showed the following scores: 30 on Beck's Depression Inventory (BDI), 43 on Beck's Anxiety Inventory (BAI), and 30 on the Revised Reaction Index (RI).

Presenting Problem

Although the patient was not diagnosed with post-traumatic stress disorder (PTSD), nor does her psychological condition meet the International Classification of Diseases (ICD-10) diagnostic criteria for PTSD, the patient had traumatic memories/experiences that may have triggered the development of pathological symptomatology. For these reasons, EMDR was selected as a treatment that enables the activation of adaptive neurophysiological mechanisms that will provide more functional information processing through the memory reconsolidation process associated with stress-based experience. One year after starting the treatment, the patient disclosed to her therapist her traumatic memories of her relationship with her mother. When a good therapeutic relationship between her and the therapist was established, and her body weight was satisfactory, EMDR therapy was used on the dysfunctionally stored memory.

A standard EMDR protocol was implemented in eight stages, and each of them will be described in more detail here.

Trauma history

During the interview, the patient disclosed the key critical event that happened to her at the age of twelve. On this occasion her mother, angry and annoyed at her perceived disobedience in not leaving the bathroom as quickly as possible, and to stop an argument between her and her older sister waiting to use the bathroom, invaded her intimate and personal space. She described that her mother came into the bathroom uninvited, bathed her by force, and cut her then-long hair. This event represented a trigger for negative feelings towards her mother, withdrawal into herself, and reducing food, because she wanted to keep the body of a child in which she felt safe. This prompted intensified feelings of shame, disgust, and the rise of an extremely negative image of herself, feelings of guilt, and the fear of her mother, the "monster". She explained that she "adored" her mother previously, but then her object of adoration turned into a "monster" wanting to destroy her. Since then, the patient began to withdraw, buy large clothes, sleep in clothes, even with socks over her pyjamas so that not even a millimetre of her body would be visible, and therefore potentially endanger her.

Aim of the EMDR treatment

The aim of the EMDR treatment is to process maladaptive traumatic memories in order to come up with adaptive responses and adequately integrate the trauma into her life experiences, and accept changes to the body with a weight recovery optimal for functioning in everyday life.

Preparing a patient for EMDR

In general, the emphasis was on establishing rapport between the therapist and the patient, increasing her resources, and also to work on peer relationships. At the beginning of the treatment, she was unmotivated and uncooperative. She showed strong resistance through silence that changed into passive aggressive communication. More active cooperation started three months after the start of the treatment and after commencing Art Therapy. EMDR was started when a trusting therapeutic relationship was built with the patient, and she was psycho-educated about the use of the EMDR therapy.

The “safe place”, as one of the techniques used to prepare the patient for this treatment, was not successfully installed since the patient was not able to find her “safe place”, but she successfully mastered other relaxation techniques in order to successfully self-soothe.

Assessment

An *assessment* of potential *targets* for the EMDR processing was undertaken to stimulate the primary aspects of traumatic memory. She identified the following targets: her mother’s “mocking” smile “from which everything started”; the father who “left” them; her mother forcefully bathing her and cutting her. Her mother’s “mocking” smile was chosen as the first target, due to the patient coming to the arranged session with a scratched face, self-injuries resulting from overwhelming feelings of anger and helplessness that had arisen from a recent confrontation with her mother.

Image that represents the worst part of the experience: mother’s “mocking” smile.

Negative Cognition/conviction (NC) in the present a patient has about himself in relation to a critical event: “I have no control”.

Positive Cognition (PC): what a patient wants to believe in relation to a critical event: “I have control.”

Validity of Positive Cognition (VoPC): thinking of this image/event how accurate these words are now on a scale of 1 (totally untrue) to 7 (completely true): 2 (two).

Current emotions in relation to a critical event: fear, anger and rage.

Place of physical sensation (where she feels disturbance in her body): heart palpitation, tightness in the chest, headache, feeling “hot” in the whole body.

Current subjective units of disturbance with regard to a critical event: on a scale of 0 (no disturbance) to 10 (greatest disturbance) the patient estimates the intensity of disturbance as 10.

Case conceptualization

Treatment course

Desensitization: bilateral stimulation (BLS) in the form of eye movements was used for the reprocessing of all associative channels of traumatic memory until resolution.

When the patient concentrated on the image of the critical event, and the negative cognition, emotions and feelings in the body relating to it, BLS was used. After each series of BLS, the patient provided feedback on associations and possible changes that occurred.

During reprocessing, anxiety was accompanied by turbulent emotional reactions and changes in the body. Given that there was a suspicion that the disturbing memories in the present are related to past events, already in the first EMDR session the “float back” method was applied for the purpose of finding an early trauma. There were other primary pathogenic memories related to the relationship with her mother and the key critical event described in the interview. She reprocessed the first event when, as a child of pre-school age, she rubbed her genitals on the back of an armchair, following which her mother became angry and shamed her for it. There followed another event at the beginning of her adolescence, when she had watched a teenage movie in her room under the covers, when her mother unexpectedly entered her room and insisted on checking if “her pants were clean”. She describes that her mother, expressing her satisfaction with clean panties at that moment, hugged and kissed her, and told her that she was “a good kid”. She gradually gained insight into the fact that her current thoughts and emotions were rooted in the past. With the help of cognitive interweave, the processing focused on identifying these emotions and channelling them. The appearance of a grander being - a fairy - representing protection and safety was significant in moments when the mother turned into a “monster”. It was noticed that the fairy was forgotten when “anorexia” appeared and took control of her body. She successfully realized that she began to use dysfunctional behaviour in her eating for the purpose of self-protection, increased sense of control over the self, and the management of overwhelming emotions. In the second session, the fairy became a resource, used for the purpose of imagining and building a barrier between her and her mother at a critical moment. She reprocessed that the fairy stood above her mother, gave her a big blanket to wrap her body in, helped her to get out of the tub, and thus protect her from her mother’s violent behaviour. She reported a significant relief.

It is assumed that, as informed by psycho-education about ego states (from a session that prepared for the EMDR before), she processed the ego state of the 17-year-old girl she is today, and as that self at the key moment she managed to fight her intrusive mother and protect her “little” self - a thirteen-year-old girl in a bath. She rose from a crouching position, pushed her mother out and left the tub before the damage was done. After this struggle, she felt a surge of excitement in her body, power in the entire body, dominance in the extremities, victory, satisfaction and self-confidence. She said that from this session she got a sense of being able to fight her mother, although she was aware that it was a daily battle until she went to college to another city and physically separated from her. She got an insight into the possibilities of making other choices and functional ways of managing emotions in everyday life.

Returning to the target, i.e. the initial image from which we started, she noticed that her mother’s smile was no longer so disturbing to her, and from an earlier intensity of 10 she now estimated it to be 3. As at the end of the EMDR session the patient needed to return to a state of emotional balance, regardless of the fact the therapeutic process has not been completed and its continuation is needed, relaxation techniques were applied. In the end, the patient managed to find her installed “safe place”.

The first EMDR session lasted 120 minutes and the second 90 minutes. Although the recommended duration of EMDR sessions was 60 to 90 minutes, the first session was extremely productive and with the patient’s agreement, its duration was extended so as not to pause in the key parts of the traumatic content processing.

In the next session with the psychologist, the patient reported a significant improvement and satisfaction with her functioning in everyday life, and explained that there was currently no need to continue treatment. Her mother did not respond to communication from the psychologist. For these reasons, treatment was not completed.

Discussion

After the period of regular psychological treatments, progress was observed in the daily functioning of the patient, but after EMDR therapy in only two sessions, there were significant changes on a cognitive, emotional (predominantly with peers), motivational and behavioural level. Compared to the earlier difficulties in recognizing and channelling her own emotions, there was considerable progress in emotional and social functioning. The treatment resulted in significant changes in trauma-related emotions, as well as the rational and emotional integration of traumatic experiences. The scores on the Anxiety Inventory (BAI1 = 43; BAI2 = 22), Depression Inventory (BDI1 = 30; BDI2 = 18) and the Revised Response Index (RI1 = 30; RI2 = 19) were significantly lower during the last encounter from initial scores taken three months before the EMDR treatment. A positive treatment outcome was also evident in mastering self-esteem skills when found in anxi-

ety state. It is also important to mention that pulling parts of her hair and eyebrow was also reduced, so the patient channelled her internal tension in a more functional way.

Though the implementation of multidisciplinary treatment, (psychiatric, nutritional, psychological, which included the use of CBT techniques and psychological counselling) led to significant improvements in the regulation of body weight, as well as the regulation of the patient's menstrual cycle, it was evident that there were periods of stagnation and even recurrence of symptoms of anxiety and mood disorder (which was also supported by BDI, BAI and RI scores prior to EMDR treatment), and a small decrease in body weight (1.5kg) was recorded. During the treatment with the psychologist, it was determined that conflict with her mother was more and more frequent, and that the patient's passive, latent aggressiveness turned into obviously aggressive behaviour that often resulted in physical violence against her mother. The early self-harm was redirected to aggressive behaviour towards others. For these reasons only EMDR treatment enabled processing of the early traumatic experience that was identified as a key trigger for the development of dysfunctional behaviour in terms of nutrition and emotional management. In addition to the pathological symptoms, normalised from a clinical perspective to a significant and moderate level, it is important to mention that physical violence was eliminated from the patient's behaviour. She was more focused on her peers, school obligations, and conflicts with her mother were rare. There was a clinical impression that this 17-year-old girl can now be seen as a person who was separate from her mother and, accordingly, experienced her body in a more positive way. During the processing of the early trauma, positive connections were made between memories related to changes in her body and shaping of features that made her a woman and a sense of adequacy, acceptance and the right to love was gained. She gained insight into the importance of separating from her intrusive and rigid mother and building self-support. The planned treatment was to continue to empower the existing resources and build new ones. She became aware of the more functional possibilities of gaining a sense of control over herself and the situation in which she was.

In the following five months, the patient rarely attended scheduled treatments. She reported feeling much better, with many school demands with less time remaining to socialize with peers, and that she had a problem with travelling to another town for psychological treatments. It was for these reasons she reported rarely coming to treatments. Also, the patient's mother, who did not show adequate insight and acknowledge the serious nature of her daughter's health, did not find time to visit a clinical psychologist, despite strict instructions that, in addition to treatment with the patient, her mother's involvement in the treatment was mandatory. Furthermore, the patient discontinued psychiatric treatment and the use of antidepressants at her own initiative.

As the patient was a hypersensitive and vulnerable girl being treated for Anorexia Nervosa, with the background of traumatic experience reasonably assumed to have been a key trigger for the development of this disorder, it was necessary to continue the multi-

disciplinary treatment. Given the physical distance and the potential difficulty in organizing the time to visit a clinical psychologist in another town, for the patient's benefit it was recommended to refer the patient to a psychologist in her place of residence or to some other nearer place. The patient's mother was informed about this in a written form in order to try to encourage her to take over responsibility for the well-being and health of her own child.

The disadvantages and limitations of this review are primarily reflected in the impossibility to display a completed case, as the patient withdrew from the treatment prior to its completion. Also, we presented the findings obtained on the basis of just one case and therefore we cannot generalise its conclusions. In the available literature, only one case of Anorexia Nervosa treated with EMDR was found, which minimises comparison with the results and indicators of other cases and studies. However this data is supported by the review of recent findings including the use of EMDR therapy in Anorexia Nervosa, where only one case review dealt with it (Balbo, Zaccagnino, Cussino and Civilotti, 2017).

Conclusions

The presented case supports the importance of including and integrating EMDR treatment into one to one therapy of an adolescent with diagnosed Anorexia Nervosa. Based on significant changes following this treatment, in this case study we can conclude that EMDR can actively contribute to alleviating the pathological symptoms of an eating disorder with an early traumatic experience in its roots. Although the treatment was not completed, the results of applying the mentioned therapy indicate a significant positive outcome after the successful treatment of the basic traumatic event. However, as surveys and case studies linking EMDR and Anorexia Nervosa are extremely rare, and the presented findings are based on one case only, it is not possible to make reliable and general conclusions about the actual role of EMDR, so further research into the effective use of EMDR therapy on people with eating disorders in controlled studies is recommended.

References

1. Balbo, M., Zaccagnino, M., Cussino, M. & Civilotti, C. (2017). Eye Movement Desensitization and Reprocessing (EMDR) and Eating Disorders: A Systematic Review. *Clinical Neuropsychiatry*, *14*(5), 321-329.
2. Carter, J.C., Bewell, C., Blackmore, E. & Woodside, B. (2006). The impact of Childhood sexual abuse on Anorexia Nervosa. *Child Abuse and Neglect*, *30*(3), 257-269.
3. Hase, M., Balmaceda, U.M., Ostacoli, L., Liebermann, P. & Hofmann, A. (2017). The AIP model of EMDR Therapy and Pathogenic Memories. *Frontiers in Psychology*, *8*, 1-5.
4. Hund, A.R. & Espelage, D.L. (2005). Childhood sexual abuse, disordered eating, alexithymia and general distress. A mediation model. *Journal of Counseling psychology*, *52*, 559-573.
5. Kong, S., & Bernstein, K. (2009). Childhood trauma as a predictor of eating psychopathology and its mediating variables in patients with eating disorders. *Journal of Clinical Nursing*, *18*, 1897-1907.
6. Racine, S.E. & Wildes, J.E. (2015). Emotion dysregulation and anorexia nervosa: An exploration of the role of childhood abuse. *International Journal of Eating Disorders*, *48*(1), 55-58.
7. Shapiro, F. & Silk Forest, M. (2013). Therapy with reprocessing - a new dimension of psychotherapy (*Terapija reprocisiranja – nova dimenzija psihoterapije*). Beograd: Psihopolis.
8. Shapiro, F. (1999). Eye Movement Desensitization and Reprocessing (EMDR) and the Anxiety Disorders Clinical and Research Implications of an Integrated Psychotherapy Treatment. *Journal of Anxiety Disorders*, *13*, 35-67.
9. Solomon, R.M. & Shapiro, F. (2008). EMDR and Adaptive Information Processing Model. *Journal of EMDR Practice and Research*, *2*(4), 315-325.
10. Steiger, H., & Israel, M. (2010). *Treatment of Psychiatric Comorbidities*. In Grilo, C. M., & Mitchell, J. E. (Eds.), *The Treatment of Eating Disorders: A Clinical Handbook* (447- 457). New York, NY: Guilford.
11. Van der Kolk, B.A. & Saporta, J. (1999). The biological response to psychic trauma: mechanisms and treatment of intrusive and numbing. *Anxiety Research*, *4*, 199-212.
12. Zaccagnino, M., Civilloti, C., Cussino, M., Callerame, C. & Fernandez, J. (2017). EMDR in Anorexia Nervosa: From a Theoretical Framework to the Treatment Guidelines. In I. Jauregui-Lobera (ed.), *Eating Disorders – A Paradigm of the Biopsychosocial Model of Illness*. (194-213). InTech.
13. Zaccagnino, M., Cussino, M., Callerame, C., Civilotti, C. & Fernandez, J. (2017). Anorexia Nervosa and EMDR. A Clinical Case. *Journal of EMDR Practice and Research*, *11*(1), 43-53.
14. Žaje Franulović, O. (2012). Anorexia Nervosa in children and adolescents. Manual of Continuous Medical Improvement. Zagreb: University of Zagreb Faculty of Medicine, 1-19. (*Anoreksija nervoza u djece i adolescenata*. Priručnik stalnog medicinskog usavršavanja. Medicinski fakultet Sveučilišta u Zagrebu): 1-19.