

# Treatment Augmentation Effects of EMDR Intervention after Traumatic Experiences in Patients with Major Depression: a Case Series

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## ABSTRACT

Treatment augmentation effects of EMDR intervention after traumatic experiences in patients with major depression: a case series

Depression is a frequent disorder that may have a recurring and chronic course with a potentially serious impact on morbidity and mortality. While around half of the patients show an inadequate response to initial antidepressant therapy, as many as 20% of patients with chronic depression do not benefit from any other alternative drugs. In this case series, three patients diagnosed with depression were treated with Eye Movement Desensitization and Reprocessing (EMDR). Three women (aged 28-44 years) diagnosed with depression were admitted to EMDR therapy. All patients actually underwent antidepressant treatment. Two patients received 150mg/day venlafaxine and mirtazapine, one patient 300mg/day bupropion and 30mg/day mirtazapine. Six to eight sessions of EMDR were applied to the patients. Before and after treatment, patients completed Beck Depression Inventory (BDI), Beck Anxiety Inventory (BAI), and State-Trait Anxiety Inventory (STAI). After treatment, there was a statistically significant reduction in patient-reported BDI, BAI, and STAI scores. EMDR therapy augmentation was effective in the treatment of patients with depression.

**Keywords:** Augmentation, depression, EMDR, traumatic experiences

## ÖZET

Majör depresyon hastalarında travmatik yaşantılar sonrası EMDR uygulamasının tedaviyi güçlendirici etkileri: Olgu serisi

Depresyon yineleyici ve süregelen bir süreci olan mortalite ve morbidite açısından ciddi sonuçlara yol açabilen yaygın bir bozukluktur. Depresyon hastalarının yaklaşık yarısının ilk tedaviye yanıtı yetersiz olmakla birlikte hastaların %20'si herhangi bir ilaçtan fayda görmemektedir. Bu yazı depresyon tanısıyla ilaç tedavisi alan üç hastanın göz hareketleri ile duyarsızlaştırma ve yeniden işleme (EMDR) müdahalesi ile şikayetlerindeki değişimi anlatmaktadır. 28-44 yaş aralığında üç kadın depresyon hastasına EMDR uygulanmıştır. İki hastanın ilaç tedavisi venlafaksin 150mg/gün ve mirtazapin 30mg/gün, diğer hastanın ilaç tedavisi ise bupropion 300mg/gün ve mirtazapin 30mg/gün idi. Hastalara 6-8 seans EMDR uygulanmıştır. Hastaların travmatik yaşam olayları çalışılmıştır. Hastalara EMDR öncesi ve sonrası olmak üzere iki defa Beck Depresyon Envanteri (BDE), Beck Anksiyete Envanteri (BAE) ve Durumluluk-Süreklilik Kaygı Ölçeği (DSKÖ) doldurtuldu. EMDR terapisi sonrası üç hastada da BDE, BAE ve DSKÖ puanlarında önemli düzeyde azalma saptandı. Bu yazıda depresyon hastalarına EMDR ile müdahale edilmesinin yararlı olduğu gösterilmiştir.

**Anahtar kelimeler:** Güçlendirme, depresyon, EMDR, travmatik yaşantılar



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## INTRODUCTION

Depression is the most commonly seen psychiatric disorder worldwide, and due to its concomitant complications, it represents a major public health issue (1). In the light of research and evidence, there are principally three approaches to depression therapy:

psychopharmacological agents (antidepressants, antipsychotics, and mood stabilizers), psychotherapy (cognitive behavioral therapy [CBT], interpersonal psychotherapy [IPT], or psychoanalytic psychotherapy), and psychosomatic treatment (electroconvulsive therapy, transcranial magnetic stimulation [TMS]) (2,3).

Eye Movement Desensitization and Reprocessing (EMDR) is one of the therapeutic approaches that has attracted significant interest in the past years. EMDR brings together elements from different well-known methods, such as cognitive, behavioral, and client-centered therapies (4). A number of studies has shown that EMDR is effective in PTSD (4). Some case presentations report that EMDR is also effective in other anxiety disorders, such as panic disorder, phobias, and psychosomatic diseases (5).

There is a limited amount of information in the literature about the use of EMDR in depressive patients (6,7). Our contribution examines the mental effects of adding EMDR to the therapy of three patients using an effective dose of antidepressants for an appropriate period. EMDR was applied by Dr. M.S., who had received first-level EMDR training.

## CASES

All the patients provided written informed consent.

### Case 1

Ms. F., 34 years old, married, university graduate, one son, reported to the psychiatry polyclinic with complaints of low spirits, lacking enjoyment of life, and pessimism. For about one year, she had been withdrawn, not wanting to meet with her friends, did not like activities that she used to enjoy, was feeling pessimistic. In the mental state examination, the patient's affect was depressed, and in the natural content of her thought process there were problems related to her disease. In her medical history, there was a workplace accident 8 years earlier, where her right eye had been injured; she had been hospitalized for an eye operation, but it was understood that vision could not be restored. After the accident, she began experiencing problems with her husband. The patient was started on venlafaxine 75mg/day, but since the complaints did not recede, the dose was increased to 150mg/day and mirtazapine 30mg/day was added to the therapy. Although the patient had been using the drugs regularly for the last two months, depressive symptoms receded

only partly. The patient was administered the Structured Clinical Interview for DSM-IV Axis I Disorders/Clinical Version (SCID-I/CV), which resulted in a diagnosis of depression. In the psychometric assessment, she scored 34 points on the Beck Depression Inventory (BDI), 12 points on the Beck Anxiety Inventory (BAI), 34 points on the Trait Anxiety Inventory (TAI), and 37 points on the State Anxiety Inventory (SAI). The accident affecting her right eye and the violence suffered from her husband three years ago were evaluated from the perspective of the patient's traumatic experiences. A picture representing the patient's traumatic experiences was composed; replacing the cognition "I am powerless", the Validation of Cognition "I am powerful" (VOC:1-7) reached two points. She felt sadness, and at the beginning of the therapy, the Subjective Units of Disturbance (SUD:1-10) were reported at eight. During the body scan, she had stated that there was pain in her head. With an SUD of six, the first session was terminated using light technique. In the following sessions, we also worked on the scenes when she suffered violence from her husband. As source for installing positive cognition, we used memories of success at the university. In the fourth and fifth EMDR session, she reported with the left eye that she could lead her life successfully, was seen by her friends as a strong person despite everything, and was even able to solve the problems in her family. Problem with these memories decreased significantly. In a psychometric assessment made after six EMDR sessions, she scored 22 points on the BDI, 7 points on the BAI, 30 points on the TAI, and 31 points on the SAI.

### Case 2

Ms. H., 36 years old, married, primary school graduate, three children, reported to the psychiatric polyclinic with tediousness, fatigue, and low spirits. The patient stated being so much out of energy that she wanted to sleep all day and could not complete her household chores. In the mental state examination, her amount of speech was reduced, her affect depressed, her thought contained problems relating to the home. In her medical history, it was understood that because of

depressive symptoms, she had started some 9 years ago to use escitalopram, sertraline, fluoxetine, mirtazapine, and some other drugs whose names she could not recall, with periods of well-being. The recent complaints had begun around two years earlier, and one year ago she was started on bupropion. In the last three months, the patient used bupropion 300mg/day and mirtazapine 30mg/day but said that she was still feeling unhappy. The patient was administered the Structured Clinical Interview for DSM-IV Axis I Disorders/Clinical Version (SCID-I/CV), and a diagnosis of depression was made. In the psychometric assessment, she scored 29 points on the BDI, 11 points on the BAI, 36 points on the TAI, and 38 points on the SAI. As traumatic experiences, we worked with scenes of violence she had suffered from her father and mother during her childhood years and from her husband's family. A picture representing the patient's traumatic experiences was composed; replacing the cognition "I am stupid", the Validation of Cognition "I am successful" (VOC:1-7) reached one point. She felt tediousness, and at the beginning of the therapy, the Subjective Units of Disturbance (SUD:1-10) were reported at nine. During the body scan, she had stated that there was pressure on her chest. With an SUD of six, the first session was terminated using light technique. In the following sessions, we also worked on the scenes when she suffered violence from her family. As source for strengthening the patient and installing positive cognition, we used memories when she was able to solve her siblings' problems by herself. In the fifth EMDR session, she thought that she might finish middle and high school as an external student and start to work. Problems with these memories decreased significantly. In a psychometric assessment made after eight EMDR sessions, she scored 17 points on the BDI, 7 points on the BAI, 30 points on the TAI, and 31 points on the SAI.

### Case 3

Ms. M., 44 years old, married, high school graduate, two children, reported to the psychiatric policlinic with an urge to weep that had begun some 15 months earlier, low spirits, pessimism, sleeping problems, and

restlessness. The patient stated that she frequently wanted to cry, harbored problems she could not explain, did not enjoy any activities, and did not want to talk to anybody. She did not want to work and continuously postponed her duties. In the mental state examination, her amount of speech was reduced, her affect depressed, her thought contained problems relating to the home. In the last three months, the patient used venlafaxine 150mg/day and mirtazapine 30mg/day but said that her unhappiness and tediousness had still not fully improved. In her medical history, it was understood that because of similar depressive symptoms, she had started some 4 years ago to use escitalopram and some other drugs whose names she could not recall, but she had taken the drugs irregularly. The patient was administered the Structured Clinical Interview for DSM-IV Axis I Disorders/Clinical Version (SCID-I/CV), and a diagnosis of depression was made. In the psychometric assessment, she scored 33 points on the BDI, 19 points on the BAI, 39 points on the TAI, and 40 points on the SAI. As a high school student, the patient had experienced violence from unknown persons. Six years ago, she had suffered an armed attack, and a person close to her had been killed. A picture representing the patient's traumatic experiences was composed; replacing the cognition "I am guilty", the Validation of Cognition "I did what I could" (VOC:1-7) reached two points. She felt sad, and at the beginning of the therapy, the Subjective Units of Disturbance (SUD:1-10) were reported at ten. During the body scan, she had stated that she had no strength in her arms and felt pressure in her stomach. With an SUD was eight, the first session was terminated using light technique and safe space exercises. In the following sessions, we worked on the scenes when she suffered violence in school. As source for strengthening the patient and installing positive cognition, we used memories when she successfully took responsibility for her children's problems by herself. In the following sessions, the patient stated that she felt strong enough to work and was going to return to her job. Problem with these memories decreased significantly. In a psychometric assessment made after eight EMDR sessions, she scored 21 points on the BDI, 11 points on the BAI, 32 points on the TAI, and 31 points on the SAI.

## DISCUSSION

There are many depressive patients who either do not respond to drugs, despite the choices available, whose complaints do not improve sufficiently, who after stopping medication immediately relapse into depressive symptoms, who do not want to use drugs or who cannot do so because of potential side effects (e.g. pregnant women) (8). These problems direct doctors in depression therapy towards psychosomatic approaches or psychotherapies.

One of the relevant choices in the treatment of depression is psychotherapy. However, despite the fact that depression is commonly seen all over the world and the number of patients is increasing every day, there are not enough qualified psychotherapists available and time and space for therapy is lacking; therefore, in Turkey as in many other countries, the option of psychotherapy is not used as frequently as pharmacotherapy in the treatment of depression (9,10). In the literature about psychotherapeutic approaches, research of an appropriate level exists only for CBT and IPT, showing their use in treating depression (11,12). For EMDR, only few studies can be found (7). Bae et al. (6) present two cases of depressive adolescents receiving three and seven sessions of EMDR therapy, respectively, reporting significant improvement after treatment. Our cases were depressive patients who responded only partially to regular medication but whose complaints decreased after 6-8 EMDR sessions.

The mechanism of EMDR functioning in depression is not yet known. Shapiro (13) explained the functioning of EMDR with a mechanism he called "Adaptive Information Processing (AIP)". He stated that the insufficiently processed and integrated distressing memories were stored inappropriately in the brain (14). Traumatic memories are first targeted and solved, and subsequently EMDR addresses the current state. It is proposed that EMDR facilitates reprocessing these memories and that traumatic memories are thus being solved (15). Vitriol et al. (16), having commonly found traumatic experiences in the history of depressive patients, pointed out the necessity to complement pharmacotherapy with interventions directed at the

trauma in order to improve the patients' state. Bockting et al. (17) showed that mental trauma is a predisposing factor for repeated and resistant depression. Our contribution also shows the importance of investigating traumatic experiences in depressive patients. It may be assumed that reprocessing of trauma and intervention in negative cognition can allow to remove the distressing effects (bodily, cognitive and emotional) of trauma (4). We also saw in our patients that during therapy the validity of positive cognition increased. We believe that the improvement of the depression level may be related not only with the intervention of EMDR in the traumatic experiences, but also with the patients' change in their negative cognition.

The most important limitations of this work are the inability to measure the patients' traumatic experiences and the low case number. In contrast with customary therapies, EMDR works with cognition, emotion, and body at the same time and leads towards the solution of the resulting complex. Considering the impact of EMDR on the bodily senses, we should not forget that in the improvement in depression scale scores there is also a contribution of the items related to the body. This also indicates an increase in the patient's general quality of life. The presence of chronically repeated or childhood traumas found in evaluating the patients' histories suggests that we are confronting characteristics of complex post-traumatic stress disorder (C-PTSD), which is a condition that requires a variety of long-term approaches when using customary therapies. Even if patients' traumatic experiences can be brought to an SUD level of 0-1, a VOC level of 6-7, and a negative body scan, it is possible that 6-8 sessions are not sufficient for patients with multiple trauma or that there are other unprocessed traumas not notified by the patient. For future studies, it needs to be considered applying more therapy sessions for this kind of situation.

In conclusion, this case series has shown the importance of investigating traumatic experiences in depressive patients who are not responding sufficiently to pharmacotherapy and intervening in these memories using EMDR. In order to research the effectiveness of EMDR for depressive patients, studies with larger case numbers and a longer follow-up are needed.

| Contribution Categories        | Name of Author   |
|--------------------------------|------------------|
| Follow up of the case          | M.S., S.A.       |
| Literature review              | M.S., S.A., M.E. |
| Manuscript writing             | M.S., M.E.       |
| Manuscript review and revision | M.S., S.A., M.E. |

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