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Case report

Application of eye movement desensitization and reprocessing therapy for cancer patients: A case study



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ABSTRACT

Introduction: The increase in cancer incidence and mortality calls for a search of effective methods to improve patient's quality of life and well-being.

Aim: The aim of this article is to present a case study that examined the application of eye movement desensitization and reprocessing (EMDR) therapy for a cancer patient.

Case study: The patient (Mrs B) was diagnosed with malignant neoplasm of the breast; and during her stay at Holycross Cancer Centre she decided to undergo EMDR therapy in order to deal with pre-existing feelings of helplessness and anxiety. She attended three 90-min sessions, all performed according to the EMDR therapy standard protocol. Furthermore, Mrs B's level of distress was measured using the distress thermometer and she filled in a problem checklist before and after the treatment. The target event, the worst image as well as positive and negative cognition were identified. Also, the validity of cognition (VOC) and subjective units of disturbance were measured before and after the therapy. Furthermore, the patient reported negative body sensations. Then, desensitization phase followed.

Results: The results of the therapy were: significantly lower level of distress and less problems reported. The patient did not feel any negative emotions or physical sensations and her VOC increased too.

Discussion: The results are discussed in relation to other studies and future directions for the research are suggested.

Conclusions: This case suggests possible advantages of EMDR therapy, demonstrating an improvement in patient's well-being in a short time.

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1. Introduction

According to International Agency for Research on Cancer (IARC),¹ in 2012, 1.7 million women were diagnosed with breast cancer and there were 6.3 million women alive who had been diagnosed with breast cancer in the previous five years. Breast cancer is also the most common cause of cancer death among women (522 thousand deaths in 2012).

In clinical practice, cancer-related stress reduction is one of the biggest challenges for psychologists and psycho-oncologists.² Cancerophobia is still very common in Poland. Cancer is believed to be an incurable illness, which leads to death and is associated with pain, suffering and various side effects.

The aim of eye movement desensitization and reprocessing (EMDR) therapy is to help client learn from the past negative events, desensitize distressing current triggers as well as incorporate future templates, which will allow the client to excel individually and within his/her interpersonal system.³ The therapy was successfully used with patients suffering from various diseases, such as fibromyalgia,⁴ neuromuscular pathologies,⁵ phantom limb pain⁶ and phantom breast syndrome,⁷ psychogenic pain⁸ and also with cancer.⁹

2. Aim

The current case study describes the application of EMDR therapy with a breast cancer patient struggling with pre-existing symptoms of anxiety and helplessness, discusses possible benefits of the therapy for cancer patients and suggests future directions for the research.

3. Case study

The patient, Mrs B, was a 57-year-old female, divorced, with an adult son who was a student. She had a secondary education and she was an office worker. Mrs B was diagnosed with malignant neoplasm of the breast (breast cancer). Her overall condition was good and there was no contraindication for EMDR therapy. She was diagnosed with F43 – reaction to severe stress and adjustment disorders, according to the 10th International Statistical Classification of Diseases and Related Health Problems (ICD-10) (2016). The patient started EMDR therapy on October 17, 2012. She decided to seek therapist's help during her stay in Holycross Cancer Centre in Kielce, at the Radiotherapy Clinic. She attended three sessions (90 min each) once a week.

3.1. Phase 1 – History and treatment planning

Mrs B was diagnosed with F43, which is a reaction to severe stress and adjustment disorders.¹⁰ The aim of the therapy was to deal with pre-existing feelings of helplessness and anxiety. During the first session, patient's level of stress was measured using the distress thermometer adapted by Życińska et al. with the agreement of American Cancer Society.¹¹ Distress thermometer is scored on an 11-point Likert scale from 0

(no distress) to 10 (extreme distress). Mrs B scored 5, which indicates that she was experiencing some distress that might have been affecting her life quite significantly.

Moreover, she filled in the problem checklist covering five main domains: practical, family, emotional, spiritual/religious and physical. The patient reported practical problems, such as child care, housing, insurance/financial problems, transportation and work. She also indicated emotional problems: fears, nervousness and worry; as well as physical problem, which was tingling in hands/feet. Mrs B did not report any family problems, spiritual/religious concerns or other problems. Additionally, she filled in Life Orientation Test – Revised (LOT-R) questionnaire. She scored 21 points out of 24, which classifies her as an optimist.

Mrs B was concerned that she will not recover from her illness and that she will be bedridden. She was also afraid of relapse. During the history taking, it was found that Mrs B felt similarly before. She stated that she had been 'living for others' for the last 40 years. Events, which caused that feelings, were: taking care of her 80-year-old mother as well as taking an university entrance examination when she was 19 years old. It was determined that the touchstone memory, which she recalled and which was experienced similarly to present problem, was the feeling of anxiety that she will not pass her exam. Because of the strong feeling of helplessness and anxiety, she failed. Since the patient's past memories were the reason of her disturbing feelings, whilst the ongoing cancer diagnosis and treatment were just present triggers, it was decided that the memory of the exam would be the therapy's target.

3.2. Phase 2 – Preparation

Mrs B was already familiar with the procedure as her acquaintance had undergone EMDR therapy, so there were no problems with the preparation. The patient practiced 'safe/calm place' exercise.

3.3. Phase 3 – Assessment and reprocessing

Second session involved presenting the target event and identifying its aspects. Mrs B's target event was taking a university entrance examination when she was 19 years old. The worst image was the end of the line for the exam. Her negative cognition connected with the event was: 'I am helpless,' while the positive cognition (PC) was 'I can manage.' On the 1-to-7 validity of cognition (VOC) scale,³ where 1 equals 'completely false,' and 7 equals 'completely true' she rated her positive belief to be 4. Emotions that the patient felt were fear, anger and anxiety. On the 1- to-10 subjective units of disturbance (SUD) scale,³ where the 0 is neutral and 10 is maximal distress, Mrs B estimated her disturbance to be 5. What is more, the patient reported disturbing physical sensations throughout her body.

3.4. Phase 4 – Desensitization

Then, the desensitization phase followed. Eye movement bilateral stimulation was used, and each set lasted roughly 20–30 s. Mrs B's level of SUD decreased from 5 to 0 in around 0.5 h.

3.5. Phase 5 – Installation

Mrs B's positive belief was "I can manage". It still felt adequate for her after the desensitization. On the 1-to-7 VOC scale her positive belief raised from 4 to 7.

3.6. Phase 6 – Body scan

Body scan revealed no sensations.

3.7. Phase 7 – Closure

The therapy session ended. The patient was informed that the desensitisation might still continue in some form and that she could practice 'safe/calm place' exercise to cope with any possible distress.

3.8. Phase 8 – Re-evaluation

Re-evaluation has taken place on the 3rd session. Mrs B stated that the traumatic event that was processed did not cause her any unpleasant feelings or sensations anymore. She did not report any negative emotions; and also her level of distress decreased to 0. LOT-R questionnaire's score was lower after the therapy (17 points) than before (21 points). However, it still classifies Mrs B as an optimist.

What is more, the memory of taking care of her 80-year-old mother was also reprocessed during the sessions as it belonged to the same memory network. Mrs B stated that neither that memory nor present triggers (such as fear of being bedridden or fear of relapse) caused her any disturbing feelings. She was informed about the possibility of continuing the therapy (also in the future) but she clearly stated that she felt she did not need it.

Mrs B was monitored every 9 weeks for half a year (three meetings) and then 17 months after the treatment (on April 2, 2014), 5 days before her control visit. Each time the patient stated that she was enjoying her life and managing well. She reported no problems and estimated her level of distress to be 0. The upcoming control visit did not cause her any stress neither she felt any fear of relapse.

4. Results

The patient's distress was measured after EMDR therapy using the distress thermometer. This time Mrs B's score was 0, which shows a significant improvement when comparing with her score before the therapy. Also, Mrs B filled in the problem checklist again. She did not report any practical, family, emotional or religious/spiritual problems. Physical problems she reported were: nose – dry/congested, skin – dry/itching, tingling in hands/feet. However, after consulting the doctor, it was found that such problems might be temporary effects of undergoing a radiotherapy, rather than psychosomatic problems. Table 1 presents a comparison of number of problems reported on the problem checklist before and after EMDR therapy for five problem domains and combined.

Moreover, patient's VOC increased from 4 to 7, which indicates that her belief 'I can manage' felt completely true to

Table 1 – Problems reported on the problem checklist before and after EMDR therapy for five problem domains and combined.

Type of problem	Before EMDR	After EMDR
Practical	5	0
Family	0	0
Emotional	3	0
Religious/spiritual	0	0
Physical	1	3 ^a
Overall	9	3

^a Radiotherapy's side effects.

her; whereas her SUD decreased from 5 to 0, which means that the memory did not cause her any distress.

5. Discussion

The goal of this article was to present the efficacy of EMDR therapy and its application for a cancer patient with pre-existing symptoms of anxiety and helplessness triggered by the cancer treatment.

The distress measured with the distress thermometer before and after the therapy decreased significantly from 5 to 0. Moreover, number of problems Mrs B had checked on the problem checklist was significantly lower after EMDR therapy. Mrs B's VOC raised from 4 to 7 while SUD decreased from 5 to 0. Mrs B's score for LOT-R questionnaire was higher before EMDR therapy than after. However, it still qualifies Mrs B as an optimist. In case of oncology patients, level of optimism is a significant factor in treatment's outcomes, for example patients suffering from both breast cancer and depression have shorter survival comparing to non-depressed.¹² Mental and emotional factors are important not only in contributing to development of a disease, but also in a recovery. EMDR therapy helps patients change their negative cognitions and replace them with positive ones. Positive cognitions toward treatment can determine the course of the disease. Shapiro³ stated that for many people suffering from life-threatening illness, addressing psychological issues results in partial or complete remission of physical symptoms.

Another advantage of EMDR therapy for cancer patients could help them to cope with fear of relapse. Very often fear and anxiety are still present, even after a successful medical treatment. On the other hand, such reactions can be caused by other event that happened long before the illness, but had the same emotional impact. Sometimes, cancer is another traumatic experience in patient's history, like in the case of Mrs B. Nevertheless, these negative feelings can become more intense around the time of annual testing or by any experience that reminds the individual of the cancer. Majority of cancer survivors fear the possibility of relapse.¹³ EMDR therapy can be used to process and mitigate the distressing responses. It could improve quality of life and enable individuals to live without fear. Seventeen months after EMDR therapy, the perspective of upcoming control visit did not cause Mrs B any stress.

The significant advantage of EMDR therapy for individuals suffering from life-threatening illness is that the treatment usually lasts shorter than in other approaches, such as

Rational behavioral therapy (RBT) or the Simonton method. Mrs B needed only three sessions to deal with pre-existing anxiety and helplessness triggered by cancer treatment. Also, patients do not have to practice, contrary to standard therapies used in the oncology units (RBT or the Simonton method). What is more, there is no homework, because all the work is done within the treatment sessions.³

Some of the patients may find it difficult to find a link between present problems and past experiences. As this case proves, current problem (i.e. cancer) and touchstone memory (exam) can be completely different. However, both triggered the same feelings and emotions. EMDR therapy that enables to find a linked past event, which would take far more time to discover using other therapy method, due to the lack of obvious connections. EMDR is guided by the adaptive information processing (AIP) model, in which current distressing situation is seen as a trigger for an unprocessed event from past.³ Whether or not the patient is aware of the past unprocessed experience and/or its similarity to the present situation, the maladaptively stored emotions, body sensations, as well as cognitions are the reflexive responses to present situations and drive patient's behaviors. In the AIP model, majority of clinical complaints is thought to be based on experiences, but with an origin below conscious awareness.³

Also, the suggested importance of eye-movements in rehabilitation planning in different approaches, such as development of motor control, could indicate new research directions for modern complex rehabilitation.¹⁴

EMDR therapy can also be applied to address patient's fear, as well as all the cancer-related traumas, such as feeling of betrayal of one's body; real or perceived indifference or callousness of friends, family and medical personnel; negative emotions connected to medical procedures; being in hospital, etc.³

The limitation of EMDR therapy for cancer patients is the fact that special care should be taken when working with elderly and/or patients with heart problems as the emotions connected to traumatic memories can be very intensive.

6. Conclusions

This case study presents how EMDR therapy can be beneficial for cancer patients and that it is useful in improving their quality of life in a short time. It gives an example of efficient stress reduction and trauma treatment. In future research, more complex cases could be described, for example cases of patients with both cancer and depression. Also, higher levels of SUD and distress would make it more challenging (but at the same time more convincing) to show the effectiveness of EMDR therapy for cancer patients.

Conflict of interest

None declared.

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