Use of Eye Movement Desensitization & Reprocessing Therapy in the Treatment of Post Traumatic Stress Disorder

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Introduction

Traumatic experience and natural disasters are sometimes an unavoidable tragedy in human life. In the past, many psychological interventions were proposed for treating not only patients suffering from Post-traumatic Stress Disorder (PTSD) but also for people who had been exposed to a traumatic event. These included post-incident psychological debriefing, Cognitive Behaviour Therapy (CBT) & other counselling techniques. In their Cochrane review, Rose et al pointed out that there was no evidence for the efficacy of one-session psychological debriefing provided soon after exposure to potentially traumatising event and that "compulsory debriefing of victims of trauma should cease" as post-incident debriefing may do more harm than good to people exposed to potentially traumatising event1. For those people who suffer from PTSD, CBT, according to clinical experience, tends to take quite a long time (in terms of months to years) to take effect. In the past 20 years there have been marked progress on the understanding and management of PTSD. One of the most significant changes is on the psychological treatment of PTSD.

Eye Movement Desensitization & Reprocessing Therapy (EMDR) is a new psychological intervention for PTSD. It is a psychological treatment that integrates psychodynamic, cognitive, behavioural techniques and was discovered by Dr. Francine Shapiro in 1987 by serendipity2. So far, over one million people have received EMDR in the world.

Theoretical Basis

The theoretical basis of EMDR is that when we encounter a traumatic event, the “bad” experience will be locked up in our brain. We need to unlock this bad memory so that we can reinterpret & reprocess it in a healthy way. EMDR facilitates the accessing and processing of traumatic memories to bring these to an adaptive resolution. Studies have shown that EMDR can reduce the strength of hippocampally mediated episodic memories of the traumatic event and the memory associated, amygdala-mediated negative effect3.

Standard Format of EMDR

The eight stages of a typical EMDR session4 are shown in Figure 1. During the therapy, the patient is asked to follow the therapist’s instruction and do therapist-directed conjugated lateral eye movements. At the same time, the patient should attend to emotionally disturbing materials in brief sequential doses while simultaneously having the eye movements. Each session typically lasts for about ninety minutes.

SPECT Studies

SPECT study of Pre and Post-EMDR for six PTSD subjects who had each received three EMDR sessions showed the following findings:

- increase in bilateral activity of the anterior cingulate (cingulate moderates the experience of real versus perceived threat, indicating that after EMDR, PTSD sufferers may be less hypervigilant)
- increase in pre-frontal lobe metabolism (indicating improvement in the ability to reason or make sense of incoming sensory stimulation.)5.
Evidence for its Efficacy

EMDR is superior in outcome to placebo treatments, and to treatments not specifically validated for PTSD e.g. active listening\(^6\), standard outpatient care consisting of individual cognitive, psychodynamic, or behavioural therapy\(^7\), relaxation training with biofeedback\(^8\). EMDR is not merely an exposure therapy. In fact, the efficacy of EMDR has been found to be relatively equivalent to CBT therapies in seven randomized clinical trials that compared the two approaches\(^9\). EMDR is one of the most researched psychotherapeutic treatments for PTSD\(^10\). Twenty controlled outcome studies have investigated the efficacy of EMDR in the treatment of PTSD. Davidson et al did a meta-analysis evaluating outcomes in thirty four different EMDR studies\(^11\). They concluded that EMDR is superior to no-treatment and non-specific treatment controls, and equivalent in outcome to exposure and cognitive behavioural therapies. The Efficacy of EMDR in treating PTSD is evidence-based. Currently, EMDR is endorsed by the many prestigious international associations or organizations as one of the recommended treatment modality for PTSD (Figure 2). Significant decrease in PTSD symptoms is noted after three-four sessions\(^9\).

What is the Most Essential Component in EMDR?

It is obvious that one would be interested in knowing what elements of EMDR contribute to its effectiveness. In fact EMDR contains many effective components, all of which are thought to contribute to treatment outcome (Figure 3). Interestingly, whether the eye movement component of EMDR is absolutely essential for the treatment effect in EMDR remains controversial. Although there are studies saying that "there is no compelling evidence that eye movements contribute to outcome in EMDR treatment"\(^12\), there are also numerous controlled studies indicating that eye movements cause a decrease in imagery vividness and distress, as well as increased memory access. It is interesting to note that besides eye movements, other external stimulus like hand-tapping and audio stimulation are often used\(^13\). For those who would like to know more about EMDR, you may visit the web site<www.emdr.com> of our association for more details. In fact, much of the information in this article can also be found there.

Conclusion

In summary, EMDR is an efficacious & evidence-based psychological treatment for patients with PTSD. It is rapid and is considered to have at least the same efficacy as CBT in the treatment of PTSD. When treating patients with PTSD, EMDR should be considered as one of the psychological treatment choices or as adjunct therapy to current pharmacological treatment.

References