

Eye Movement Desensitization & Reprocessing (EMDR) for Treatment of PTSD

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What is EMDR?

Brief history

- EMDR is a new form of integrative psychotherapy for trauma
- Developed by Francine Shapiro in 1989
- First called EMD, later EMDR
- The current protocol was codified in 1992 and published in 1995

Brief history

- EMDR → Reprocessing therapy
EM = Tapping = Auditory stimulation
alternating bilateral stimuli
EM is not an essential part?

Comprehensive text book of Psychiatry (2000), 7th

- “In recent years a new technique, EMDR, a form of exposure therapy, has been shown to help desensitize patient with PTSD without fully engaging them in a verbal relieving the traumatic experience.”

- Synopsis of Psychiatry (2003), 9th
"A few studies have demonstrated that including saccades while a person is imagining or thinking about an anxiety-producing event can yield a positive thought or image that results in decreased anxiety. EMDR has been used in PTSD and phobias".

- Textbook of Anxiety Disorders
American Psychiatric Publishing 2001
"Although some reports, which mainly included patients with chronic PTSD, found little to commend this method, other studies have been encouraging and indicate that this new form of treatment appears capable of producing powerful therapeutic effects in some patient with PTSD."

Backlash

- 'Pseudoscience' (Herbert et al. 2000)
no empirical validation
extensive commercial promotion & popularity
- 'Mesmerism' (McNally 1999)
similar to Animal magnetism in the 18th c

Cons EMDR group

- Foa E
- McNally RJ
- Herbert JD
- Lohr JM
- Taylor S
- Devilly J

Does EMDR work for PTSD?

Current Status of Effectiveness

- Strong evidence : civilian PTSD
 - Less strong : combat-related PTSD
 - Not proven : other clinical problems
- * two controlled studies failed to address its' effectiveness in panic disorder & phobia

Comprehensive text book of Psychiatry (2000), 7th

On PTSD....

- Exposure therapy=E
- Cognitive Behavioral therapy=P
- EMDR=P

E ; Efficacious, P; Probably efficacious

Table 30.2-17 Empirically Supported Behavioral Treatment for adult Psychiatry Disorder

Other reviews

- APA(1995): empirically supported treatment
'probably efficacious for civilian PTSD' along with exposure therapy & SIT
- ISTSS (2000)
effective with a A/B rating

Meta-analysis

- Van Etten & Taylor(1998)
meta-analysis of all treatments for PTSD
"EMDR is effective for PTSD, and more efficient than other treatments"
- Davidson & Parker (2001)
Meta-analysis
EMDR = Exposure therapy

Civilian PTSD

- Thirteen RCTs
 - ↳ 12 : other treatment, wait-list, or delayed treatment
 - ↳ 1 : Taylor et al. (2003)
 - ET > EMDR = Relaxation

Combat PTSD

- Five RCTs
 - ↳ 4 : other treatment, no treatment
 - ↳ 1 : Jensen (1994)
 - EMDR = No treatment

EMDR vs. Exposure therapy

- Lohr (1995), Davison (2001), Lee (2003) → EMDR=ET
- Pitmann (1996) → EMDR>ET
- Devilly (1999) → EMDR<ET (PE+CR+R)
- Ironson(2002) → EMDR>ET (efficient)
 - After 3s ; EMDR 70%, ET 15%
 - After 6s ; EMDR=ET

Follow up evaluation

- Controversy
- Wilson (1997) : 15 Ms → Maintained
- Macklin (2000) : 5 yrs → Not sustained

Why does EMDR work?

Neurobiological studies

- Levin et al. (1999): Hyperactivity at ant.cingulate gyrus & left frontal cortex (SPECT)
- Increased collateral synchronization on qEEG
- Heber et al. (2002)
an increase in basal cortisol levels
a more attenuated cortisol hypersuppression following EMDR treatment

Stickgold (2002)

- Alternating bilateral stimuli
 - constantly shifting attention between hemispheres(orienting response)
 - REM like state facilitating cortical integration of traumatic memory

What does EMDR tell us about psychopathology of PTSD?

Memory Process

- Event → neo-cortex → hippocampus → other limbic area + amygdala (emotional component): episodic memory → neo-cortex (semantic or longterm memory)

Effect of EMDR on memory

- Attentional orienting (Kuiken et al. 2002)
 - attentional & semantic flexibility
 - transformation of narrative representation
- Retrieval of episodic memory (Christman et al. 2002)

Mechanism of EMDR

- EMDR → resynchronization of the brain
 - 1) Interhemispheric interaction 증가 → limbic system을 downregulation → neocortex가 limbic system을 장악
 - 2) Anterior cingulate gyrus의 기능을 효과적 → 실제 위협과 지각된 위협을 구별

Typical Sessions with PTSD patients

Eight Phases of EMDR

1. Patient history & treatment planning
2. Preparation
3. **Assessment**
4. **Desensitization & reprocessing**
5. **Installation of positive cognition**
6. **Body scan**
7. **Closure**
8. Reevaluation

Assessment

- 1) distressing image in memory
- 2) associated negative cognition
- 3) alternative positive cognition
- 4) rating validity of positive cognition
- 5) emotion associated with memory
- 6) rating subjective level of disturbance

Desensitization & reprocessing

- Focus on VI, NB, BS
- Side to side eye movements
- *New material comes up and continue*
- Alternating focused attention and client feedback
- Decrease in SUDS to 0
