

## **P-975 - FROM MIND TO BRAIN: EVENT-RELATED POTENTIALS AND EMDR TREATMENT OF POST-TRAUMATIC STRESS DISORDER**

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**Introduction:** Eye movement desensitization and reprocessing (EMDR) is a relevant technique to improve post-traumatic stress disorder (PTSD) symptoms.

**Objectives:** To compare the electrophysiological profile of patients suffering post traumatic stress disorder before and after EMDR treatment.

**Aims:** The authors are in search of a specific event-related brain potentials profile for post-traumatic stress disorder (PTSD).

**Methods:** Eight patients suffering from post-traumatic stress disorder (PTSD) following a severe traumatic event, were assessed with event-related brain potentials (ERPs) in a modified oddball paradigm containing auditory standard, target, and novel tones. ERPs were assessed before and after a treatment session using the eye movement desensitization and reprocessing method.

**Results:** Psychometric assessment revealed a marked improvement of the PTSD symptoms after treatment. Compared to a control group that underwent sham treatment, ERPs of the patients showed morphological changes in the post-treatment recording, suggesting a reduced orienting to novel stimuli and reduced arousal level after the treatment.

**Conclusions:** EMDR therapy provides clinical improvement and event-related potentials changes that could be used in clinical practice as an interesting marker to assess diagnosis and successful treatment of PTSD.