

## EMDR BIOLOGICAL EFFECTS

This is a broad brush review prepared by E. C. Hurley documenting the physiological changes that accompany EMDR processing.

- Increased salivary cortisol in Borderline (Heber et al, 2002)
- Moderate effect size on standardized outcome measures in anxiety disordered subjects, “spectacular” effect size on process measures (Davidson & Parker, 2001)
- Decreased physiological reactivity to trauma script (Sack et al 2004)
- Normalized SPECT in response to trauma script (Levin et al, 2000)
- Normalized resting SPECT (Oh & Choy, 2007)
- Reduced evoked potentials (Lambrecht et al, 2004)
- Increased hippocampal volume (Bossini et al, 2004)
- Decreases vividness & emotional distress of negative autobiographical memory (Andrade et al, 1997; van den Hout et al 2001; Kavanaugh et al, 2001)
- Reduces arousal (Barrowcliff et al, 2001; MacCullouch, 2002; Eloffson et al, 2007; Sack et al, 2008)
- Enhances retrieval and accuracy of episodic memory (Christman et al, 2001; Christman et al, 2006; Parker & Dangle, 2006; Parker Relph & Dangle, 2008)
- In randomized comparisons of EMDR with PE or a combination of PE and Cognitive Restructuring or Stress Inoculation, EMDR has equal effects with no homework...