

Publication

Glucocorticoid-induced enhancement of extinction-from animal models to clinical trials

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Extensive evidence from both animal model and human research indicates that glucocorticoid hormones are crucially involved in modulating memory performance. Glucocorticoids, which are released during stressful or emotionally arousing experiences, enhance the consolidation of new memories, including extinction memory, but reduce the retrieval of previously stored memories. These memory-modulating properties of glucocorticoids have recently received considerable interest for translational purposes because strong aversive memories lie at the core of several fear-related disorders, including post-traumatic stress disorder and phobias. Moreover, exposure-based psychological treatment of these disorders relies on successful fear extinction. In this review, we argue that glucocorticoid-based interventions facilitate fear extinction by reducing the retrieval of aversive memories and enhancing the consolidation of extinction memories. Several clinical trials have already indicated that glucocorticoids might be indeed helpful in the treatment of fear-related disorders.

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