
STRESS REACTIVITY IN EUTHYMIC BIPOLAR PATIENTS AND THEIR UNAFFECTED SIBLINGS

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Background: Bipolar disorder is characterized by depressive and manic mood episodes. Despite an overall high heritability, environmental factors play a critical role in bipolar disorder. Stress negatively influences the clinical course bipolar disorder and may trigger mood episodes. Surprisingly, the study of stress reactivity in bipolar patients has remained relatively unexplored. Moreover, it is unknown whether altered stress reactivity may be a trait marker in unaffected siblings of bipolar disorder patients who possess an increased genetic risk for this disorder.

Methods: Male and female euthymic bipolar disorder patients (N=49), unaffected siblings (N=27) and healthy controls (N=48) were exposed to a validated social stress test. The endocrine stress response was measured using saliva cortisol levels, whereas salivary alpha-amylase (sAA) were determined as an index for the adrenergic stress response.

Results: Exposure to stress resulted in a differential endocrine and adrenergic stress reactivity between bipolar disorder patients and their unaffected sibling. Importantly, bipolar disorder patients displayed a blunted endocrine but exaggerated adrenergic response.

Conclusions: Our findings illustrate the importance of measuring stress reactivity in bipolar disorder. These results provide insight into stress system functionality of euthymic bipolar disorder and enable a direct comparison with unaffected siblings who display an increased risk but have not developed bipolar disorder.