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BIOLOGICAL STRESS MARKERS, EXECUTIVE FUNCTIONS AND SELF-PERCEIVED STRESS IN ADULTS WITH ADHD (ATTENTION-DEFICIT /HYPERACTIVITY DISORDER)

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Introduction: The management of normal daily tasks may be complicated for adults with ADHD (attention-deficit/hyperactivity disorder) due to executive dysfunctions. ADHD may thus increase the risk of chronic stress in everyday life.

Objective: To study endocrinological and psycho physiological stress markers in adults with ADHD in association to performance in test of executive functions (EF) and self-perceived stress.

Methods: Cardiovascular stress markers were assessed in 30 adults with ADHD with no psychoactive medication, and 30 healthy controls during: (1) non-stress baseline; (2) cognitive stress; and (3) non-stress recovery. The Visual Analogues Scale was used to assess self-perceived stress. Salivary cortisol was measured pre- and post-experiment. To measure stress in everyday life we assessed diurnal cortisol values, stressors and self-ratings of stress.

Results: The group with ADHD showed higher self-perceived stress but attenuated or atypical cardiovascular stress reactivity during experimentally induced stress, and stress reactivity predicted performance in the executive test. Baseline cardiovasular values did not differ from the controls. The diagnosis of ADHD significantly increased the risk of belonging to the group with high post-stress cortisol levels. The two groups were comparable with respect to overall diurnal cortisol levels and rhythm. The ADHD group reported significantly higher self-perceived stress and these values correlated with level of stressors in everyday life.

Conclusions: The overall baseline values in biological stress markers may be comparable between adults with ADHD and healthy controls, while the stress reactivity and recovery pattern may differ between the two groups.

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