
SPECIFIC CORTISOL RESPONSE TO STRESS IN PATIENTS WITH EATING DISORDERS: A SIGN OF DISTURBED HYPOTHALAMIC-PITUITARY-ADRENAL AXIS ACTIVITY?

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INTRODUCTION: There are some data that suggest the existence of a dysfunction of the Hypothalamic-Pituitary-Adrenal (HPA) Axis in patients with eating disorders (anorexia nervosa –AN- and bulimia nervosa -BN-). If such a dysfunction exists, it would result in an altered cortisol response to stress.

OBJECTIVES: To compare the cortisol response to stress in a group of patients with AN, BN and a control group.

METHODS: Seventeen female AN patients, 17 female BN patients and 26 healthy female controls were compared. The Trier Social Stress Test (TSST) was used to induce stress. Throughout the test, seven samples of saliva were collected from each subject, and cortisol was investigated in each of the samples using radioimmunoassay (RIA).

RESULTS: Each group had a specific profile of cortisol release. Upon arrival at the laboratory, the AN patients had higher cortisol levels, but they quickly returned to normal values, becoming similar to those of controls. In contrast, in the BN patients the cortisol levels were at any time significantly lower than those of the AN patients and the controls, displaying a globally blunted response.

CONCLUSIONS: The results support the hypothesis of a dysfunctional functioning of HPA axis in patients with eatings disorders, although suggest that it might be particularly important in BN patients.

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