

Cortisol Awakening Response in Symptomatic Patients with anorexia Nervosa and Bulimia Nervosa Exposed to Childhood Trauma

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Introduction. Childhood trauma exposure is a risk factor for adult psychopathology in general. The biological mechanisms mediating this increased risk involve the endogenous stress response system, including the hypothalamus-pituitary-adrenal (HPA) axis, that undergoes trauma-induced functional changes, which may persist later in life. Since an association between stressful life events and the onset/course of anorexia nervosa (AN) or bulimia nervosa (BN) has been demonstrated, a role for the HPA axis in their pathophysiology seems likely.

Objectives and Aims. The cortisol awakening response (CAR) is a useful method to assess the functioning of HPA axis. Therefore, we conducted an explorative study aiming to examine possible associations between childhood maltreatments and HPA axis functioning, as assessed by the CAR, in adult patients with AN or BN.

Methods. Saliva samples were collected in 24 patients with acute AN, 22 with acute BN and 31 healthy controls at wakening and after 15, 30 and 60 min. They filled in the Childhood Trauma Questionnaire (CTQ), which assesses five specific forms of childhood maltreatment.

Results. As compared to control group, no-maltreated AN group exhibited an enhanced CAR whereas no-maltreated BN group showed a normal CAR. Moreover, both AN and BN patients with childhood maltreatment exhibited a statistically significant blunted CAR as compared to no-maltreated patients.

Discussion. Present findings suggest that childhood adverse experiences may affect the CAR in adults with AN or BN and this may represent a functional background of the endogenous stress response system, which may have relevant implications in the pathophysiology of EDs.