The interplay between inflammatory biomarkers, history of childhood maltreatment and psychopathology: a cluster analysis in patients with eating disorders

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Abstract

OBJECTIVE: Eating Disorders (EDs) are psychiatric disorders characterized by severe implications for both physical and mental health, with growing evidence pointing towards the role of childhood maltreatment (CM) in their etiology and clinical progression. Preliminary evidence demonstrates an association between CM and inflammatory biomarkers. The objective of the study was to elucidate the interplay between CM, ED psychopathology and specific inflammatory biomarkers such as CRP, IL-6 and a suPAR which was first tested in this population.

METHODS: The study involved 140 female participants, comprising 70 patients with anorexia nervosa (AN), 56 patients with bulimia nervosa (BN), and 24 healthy controls (HCs). Childhood maltreatment was measured using Childhood Trauma Questionnaire (CTQ-SF); inflammatory biomarkers were measured from blood samples. K-means clustering was used to test the hypothesis that latent clusters could be identified between patients affected by EDs based on serum levels of inflammatory biomarkers alone (CRP, IL-6, suPAR).

RESULT: Patients with EDs exhibited significantly higher levels of CRP and suPAR compared to HCs, regardless of diagnostic categorization or severity of psychopathology. A direct association between CM and elevated levels of inflammatory biomarkers, particularly CRP, IL-6, and suPAR was found. Cluster analysis identified two distinct populations among patients with EDs, with the group showing elevated inflammatory biomarkers likely to report more severe CM.

DISCUSSION: Even though preliminary, the results of the present study seem to support the a biologically-determined "maltreatment-phenotype" in EDs. These findings have the potential to better understand pathophysiology and tailor treatments with specific biomarkers as target in the future.

Topics: Prevention

For workshops only
No Answer Given

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