

P-246 - THE NEUROIMAGING OF DISSOCIATIVE DISORDERS

A.Staniloiu^{1,2}, H.J.Markowitsch¹

¹Department of Physiological Psychology, University of Bielefeld, Bielefeld, Germany, ²Department of Psychiatry, University of Toronto, Toronto, ON, Canada

Introduction: Dissociative disorders are characterized by disturbances of integration of memory, perception, consciousness or identity. They were linked to psychological stress or trauma across various cultures. Dissociative amnesia and fugue, depersonalization disorder, dissociative identity disorder and dissociative disorder not otherwise specified (such as Ganser syndrome) belong to dissociative disorders in DSM-IV-TR. In contrast to DSM-IV-TR, ICD-10 also subsumes the conversion disorder under the category of dissociative (conversion) disorders.

Objectives: This work's objective is establishing greater recognition of the neural correlates of dissociative disorders.

Aims: We review neuroimaging data pertaining to dissociative amnesia and fugue, depersonalization disorder, dissociative identity disorder (multiple personality disorder), Ganser syndrome and various forms of conversion disorder, which were obtained with functional and structural imaging techniques, including diffusion tensor imaging or magnetization transfer ratio measurements.

Methods: In addition to own imaging data from patients with dissociative amnesia and fugue, a comprehensive review of the scientific literature on the neuroimaging of dissociative disorders was performed.

Results: Neuroimaging research data point to metabolic and sometimes even structural brain alterations in dissociative disorders, involving regions that are agreed upon to play roles in mnemonic processing, self referential processing (including body schema), perception, consciousness and/or emotional processing.

Conclusions: The use of functional and newer structural brain imaging methods has improved and will continue to further our understanding of the neural correlates of dissociative disorders and has provided evidence that environmentally-driven (stress-related) alterations of cognition, identity, body schema, perception, affectivity and behavior are accompanied by metabolic and even structural brain changes.