Biographical memory, autonoetic consciousness and the self

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**Introduction:** Episodic-autobiographical memory (EAM) is the highest ontogenetic human achievement and is defined as the conjunction of subjective time, autonoetic consciousness and the experiencing self. The EAM system is more susceptible to insults than other memory systems and is predominantly affected in amnesic disorders. Dissociative amnesia is triggered by psychological stress and usually presents with retrograde memory impairment in the EAM domain.

**Objectives:** This work's objectives are establishing greater recognition of the changes in the area of personality dimensions, self and autonoetic consciousness, accompanying dissociative amnesia.

Aims: We review data from own patients with dissociative amnesia or fugue

Methods: Patients were investigated medically, neuropsychologically and neuroradiologically.

**Results:** We found impairments of self and self-referential processing in patients with dissociative amnesia, such as profound loss of personal identity, decreased ability for self-reflection and self projection and anomalous self-face processing. We also identified changes in personality dimensions involving affectivity, perception, cognition (e.g. social cognition) and behavior.

**Conclusions:** The observed changes in self and autonoetic consciousness may represent a consequence of amnesia. Studies indicate a right hemispheric bias for higher forms of self awareness. In retrograde dissociative amnesia, we found a hypometabolism in right fronto-temporal areas, suggesting a defective synchronization during retrieval between processing of affectively-loaded personal events and fact-based processing. This synchronization abnormality in our opinion not only leads to a memory blockade, but also to a shrinkage of self and loss of autonoetic consciousness in dissociative amnesic conditions.