

Poster presentation

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Investigation of memory suppression in borderline personality disorder patients

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Background

Recently it has been suggested that hippocampus and dorsolateral prefrontal cortex (DLPFC) are involved in the mechanism of suppression of unwanted memories, which may play a key role in the pathophysiology of some psychopathological symptoms, like emotional instability, flashbacks and intrusive thoughts (Anderson *et al.* 2004). These symptoms are often seen in subjects with stress related disorders (Sala *et al.* 2004), such as Borderline Personality Disorder (BPD). This is a severe mental disorder characterized by mood instability, impulse discontrol, instability of personal relationships, being frequently associated with history of childhood traumatic experiences. However, although its pathophysiology is still largely unknown, some brain imaging studies reported structural and functional abnormalities of hippocampus and DLPFC in BPD patients (Brambilla *et al.* 2004; Driessen *et al.* 2000). In this ongoing study we are investigating whether the repression mechanism is affected in BPD, possibly in part sustaining the pathophysiology and the psychopathology of the disorder.

Materials and methods

The Anderson's paradigm, which explores the capacity of remembering and suppressing pair of words previously learned, is being administered to patients with BPD and healthy controls.

Results

Preliminary results will be presented at the congress.

Discussion

The think/no-think paradigm from Anderson *et al.* (Anderson and Green 2001) investigating hippocampal/DLPFC functioning in memory suppression may be helpful to study the memory repression mechanism in patients with BPD.

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