

P-797 - RESIDUAL COGNITIVE IMPAIRMENT IN PATIENTS AFFECTED BY BIPOLAR DISORDER DURING EUTHYMIA: AN ASSESSMENT WITH FUNCTIONAL MAGNETIC RESONANCE IMAGING (FMRI)

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Introduction: Bipolar Disorder (BD) is a chronic mood disorder with a prevalence estimated around 1-2%. Bipolar patients may experience social and working residual impairment even during euthymia. Furthermore, specific cognitive deficits, particularly involving working memory (WM), may persist during euthymia as well.

Aim: To evaluate the possible presence of cognitive and functional differences between euthymic bipolar subjects vs. healthy controls during euthymia by means of a WM task at fMRI associated with neuropsychological evaluations.

Methods: A sample of 30 subjects aged between 20 and 45 years (15 with BD and 15 controls) underwent fMRI examination at 3 Tesla with tasks of working memory (n-back). All participants received a neuropsychological evaluation, including Stroop Color-Word Interference test, Tower of London, Trail Making Test, Wisconsin Card Sorting Test and Verbal Fluency Test. Comparison tests were performed using statistical software SPSS and SPM5.

Results: The performance of the control group was significantly higher than both at the n-back task and at the neuropsychological tests. The full-factorial analysis of fMRI data showed a hypoactivation in bipolar patients in particular hippocampus and thalamus, associated with increased involvement of areas not involved in the frontal-parietal networks classically associated with WM.

Conclusions: The results seem to confirm the existence of a residual dysfunction during euthymia phase in BD, suggesting two distinct patterns of activation in the two groups studied, both from a neuropsychological point of view and from a neuroimaging perspective.