

Poster presentation

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Verbal processing in patients with bipolar disorder during a manic episode

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Background

Dichotic listening tests have been used to study cerebral lateralization for language and thus the functional integrity of the left temporal lobe. The aim of the present study was to investigate dichotic listening performance, as well as the impact of acute symptom improvement on performance, in a group of Greek patients with bipolar disorder during a manic episode.

Materials and methods

Participants were 20 patients with a DSM-IV diagnosis of bipolar disorder during a manic episode and 22 healthy controls matched on age, education and gender ratio. Participants were assessed with a computerized dichotic listening task presenting fused simple words, a presumed measure of lateralized temporal lobe language processing. The examinees were instructed to repeat the words they had just heard without any other specific instruction. The variable of interest was the total number of the words reported correctly separately for each ear; when both words were repeated, only the first one was counted as correct. Both groups were evaluated twice within an interval of approximately 4 weeks; patients underwent clinical and neuropsychological assessment at the beginning and again at the end of their hospitalization (mean duration: 26.5, SD: 11 days).

Results

Repeated measures analyses of variance revealed a significant main effect only for Group [$F(1,40) = 42.81, p < 0.001$], with the manic patients reporting fewer correct words than the healthy comparison group, but neither for Ear [$F(1,40) = 0.31, p = 0.58$] nor for Time of testing [$F(1,68) = 2.45, p = 0.13$]. We found no significant interaction between Group x Ear [$F(1,40) = 2.56, p = 0.18$], Group x Time [$F(1,40) = 0.35, p = 0.56$], or Group x Ear x Time [$F(1,40) = 1.59, p = 0.21$].

Conclusions

Patients with bipolar disorder during a manic exacerbation showed an attentional deficit, which remained consistent even after substantial symptom improvement.