

Abstract

Background: There is considerable interest in the identification of neurocognitive impairment in patients with Bipolar Disorder. The notion that sufferers of Bipolar disorder achieve complete syndromal and functional recovery between illness episodes has been brought into question, evidenced by a large proportion of patients failing to regain the pre-morbid level of functioning after resolution of major affective symptoms.

Methods: This study used a computerized battery to assess the cognitive profile (memory, psychomotor speed, reaction time, complex attention, processing speed and cognitive flexibility) of euthymic patients with Bipolar I Disorder. 52 Bipolar I out-patients in Tuen Mun Mental Health Centre were recruited while 52 healthy control participants were matched for age and sex. All participants completed the Central Nervous System Vital Signs Computerized Battery, the Wechsler Adult Intelligence Scale-3 Subtest Short Form and were confirmed in euthymic state according to the Newcastle Euthymia Protocol.

Results: There were statistically significant worse scores for those with Bipolar I Disorder on all cognitive domains. When using two or more scores below the 5th percentile as a cutoff for neurocognitive impairment, 46.2% of the patients with Bipolar I disorder and none of the control sample scored in this range. Further correlational analysis among the

illness variables in Bipolar I Disorder revealed that cognitive performance was inversely correlated with the number of manic episodes and duration of illness, i.e. the greater the number of manic episodes and the longer the duration of illness, the worse the cognitive performance.

Conclusions: Euthymic Bipolar I patients performed significantly worse than matched controls in all cognitive measures and that the difference was associated with the number of manic episodes and duration of illness. The results of this study are consistent with many of the empirical neurocognitive studies. It is the first local study that investigates in details the neuropsychological profile of Bipolar I patients. The results help us to understand better the illness nature and to make recommendations on possible coping of these neurocognitive deficits. It provides a strong rationale for early intervention and treatment.

Keywords: Bipolar Affective Disorder, Cognitive Performance