A Follow up Study of Cognitive Functions During Depressive Episodes

Said Abd Elazim[1], Momtaz Abd Elwahab[1], Maha Mobasher[1], Noha Sabry[1] and Hany Hennawy[2]

[1]Department of Psychiatry, Kasr Al Ainy Faculty of Medicine, Cairo University, [2]Abasseya hospital

Date received: Desember 12th, 2007
Date accepted: February 18th, 2008

Aim of the work: to evaluate objectively the profile of cognitive deficits associated with depression as well as to identify if these cognitive deficits represent an important and reliable marker which might have a role in assessment of the degree of severity, the prognosis and the choice of the therapeutic modality.

Patients and Method: 30 major depressive episode patients diagnosed according to DSM IV (unipolar and bipolar) consecutively selected from psychiatric outpatients' clinic in Abasia mental hospital of both sexes (12 males and 18 females) were included in the study. Their ages ranged between 18-45. All patients were subjected to psychiatric examination using semi structural interview derived from Abasia Mental Hospital sheet as well as full medical examination and Mini Mental State Examination. Psychometric assessment included Hamilton Rating Scale for Depression (HRSD) and Wisconsin Card Sorting Test (WCST). They were followed up after a month then two months of starting treatment.

Results: In the 1st interview the mean of the total score of HDRS was 29.8±8.06, while the work and activities was 2.57±0.86 and the mean score of the refutation 1.06 ± 0.97. At one month follow up there was statistically significant correlation for patients' results on HDRS and depressive symptoms in general and those related to cognitive functions (work and activities and retardation), all improved with therapy. The results of WCST subscales showed marked improvement after treatment in the 2nd and 3rd interview. The improvement in the subscales of persevere errors, categories completed and conceptual level responses were statistically significant. There were no statistically significant differences between males and the females on WCST performance. The correlation between the extent of cognitive deficits and depression revealed that both preservation and conceptualization deficits have statistically significant positive correlation with depression.

Conclusion: depressed patients have some sort of cognitive impairments which are of the most important components of depressive symptoms. The study suggested considering these impairments as one of the predictive markers in depression might help to assess the benefit of the current therapeutic drugs or regimen.

Keywords: Depression, cognitive functions

Abbreviations:
HRSD: Hamilton Rating Scale for Depression *WCST: Wisconsin Card Sorting Test*

Egypt. J. Psychiatry, June 2008; 28(2):4-11

INTRODUCTION

By the year 2020, the World Health Organization (WHO) estimate depression as number two cause of "lost years of healthy life" world wide, second to ischemic heart disease *(WHO, 1998)*. Cognitive impairment in depression can be so disabling that they affect all social and work activities, disrupting the day-to day lives of patients and those surrounding *(Murray and Lopez, 2001)*. Depressed persons in intellectually demanding academic or occupational pursuits are often unable to function adequately even when they have only mild concentration problems. In elderly depressed patients these signs are sometimes mistaken for early signs of dementia.

Cognitive impairment is a constituent feature of depression and it affects the ability to think, concentrate, formulate ideas, reasoning and remembering. Identifying the presence of cognitive impairment and its profile in depression should lead to early intervention, which is postulated to result in improved patient functional and occupational abilities and consequently will lead to more satisfaction of their relatives and less burden on health resources *(Kessing, 1998)*.

Researchers nowadays suggest that cognitive deficits can be used as a reliable marker in affective disorder. The identification of this marker will affect many aspects of illness as relapse and response to treatment as well as predicting people at high risk to develop the disorder *(Colleo, et al. 1998; Sharma and Mockler, 1998)*.

AIM OF THE WORK

To evaluate objectively the profile of cognitive deficits associated with depression and to identify if these cognitive deficits represent an important and reliable