Original Paper

Effect of *Ginkgo biloba*, Risperidone and Biperiden regimen in chronic schizophrenia

Nikfarjam M (MD)¹, Goodarzi I (MD)¹, Parsai Arshad SH (MD)²
Parvin N (MSc)*³, Safdari-Dehcheshmeh F (MSc)⁴

¹Assistant Professor, Department of Psychiatry, Medical Plants Research Center, Shahrekord University of Medical Sciences, Shahrekord, Iran. ²General physician, Shahrekord University of Medical Sciences, Shahrekord, Iran. ³Academic Instructor, Psychiatric Nursing, Medical Plants Research Center, Shahrekord University of Medical Sciences, Shahrekord, Iran. ⁴Academic Instructor, Department of Midwifery, Shahrekord University of Medical Sciences, Shahrekord, Iran.

Abstract

**Background and Objective:** Schizophrenia is a disorder characterized by a chronic recurrent course. Despite the availability of an ever-expanding range of typical and atypical antipsychotics, a substantial proportion of patients with schizophrenia show a partial or total lack of response to antipsychotic monotherapy. This study was done to evaluate the clinical effects of *Ginkgo biloba* as an adjunct to the Risperidone and Biperiden in the treatment of chronic schizophrenic patients.

**Materials and Methods:** This randomized clinical trial study was carried out on 60 chronic schizophrenic patients in Sina hospital Shahrekord, Iran during 2009-10. Schizophrenia was diagnosed by DSM-IV-TR criteria. Subjects were randomly divided into intervention and control groups. Two groups were matched according to the age, sex, education, duration of illness. Patients in interventional group received Risperidone up to 6mg/day, Biperiden 4mg/day and *Ginkgo biloba* 240 mg/day for 12 weeks. The control group received Risperidone up to 6mg/day and Biperiden 4mg/day for 12 weeks. The scales for assessment of positive symptoms (SAPS) and assessment of negative symptoms (SANS) were recorded in prior, 6th and 12th weeks. Data analyzed by using SPSS-15 and student t-test.

**Results:** The mean score of positive symptoms were 55.7±2.1 and 74.4±2.3 in interventional and control groups, respectively (P<0.05) after 12 weeks. The mean score of negative symptoms were 63±1.3 and 69.3±1.8 in interventional and controls, respectively (P<0.05) after 12 weeks.

**Conclusion:** This study suggested that the use of *Ginkgo biloba* as an adjunct to Respridone and Biperiden was more effective than Risperidone with Biperiden regimen improving psychological condition of chronic schizophrenic patients.

**Keywords:** Schizophrenia, *Ginkgo biloba*, Risperidone, Biperiden, Symptoms

*Corresponding Author: Parvin N (MSc), E-mail: np285@yahoo.com*

Received 29 January 2011 Revised 13 July 2011 Accepted 28 August 2011