

Oral presentation

Open Access

Do atypical antipsychotics fail to exert cognitive sparing effects? respect cognitive function?

C Papageorgiou^{*1}, P Oulis¹ and A Rabavilas²

Address: ¹Assistant Professor of Psychiatry, Eginition Hospital, University of Athens, Greece and ²Professor of Psychiatry, Eginition Hospital, University of Athens, Greece

* Corresponding author

from International Society on Brain and Behaviour: 1st International Congress on Brain and Behaviour
Hyatt Regency Hotel, Thessaloniki, Greece, 20–23 November, 2003

Published: 23 December 2003

Received: 1 November 2003

Annals of General Hospital Psychiatry 2003, **2**(Suppl 1):S34

This article is available from: <http://www.general-hospital-psychiatry.com/content/2/S1/S34>

Atypical antipsychotics appear to be effective in treating hallucinations and enhancing cognitive function in schizophrenia. However, the underlying psychophysiological mechanisms of these deficits and the effects of treatment on this dimension of illness remain unclear. Since the P600 component of event-related potentials represents 'the second-pass parsing process' of information processing, the present study focuses on P600 elicited during a working memory test in sixteen male schizophrenic patients experiencing auditory hallucinations before and after having been treated with clozapine and olanzapine, and thirteen male normal subjects matched for age and educational level. Before treatment patients, as compared to controls showed reduced P600 amplitudes on right parietal region, while in the remitted phase demonstrated significantly lower P600 amplitudes located on the right parietal and temporofrontal areas, as compared to themselves before treatment and to normal controls. The patients' memory performance before and after treatment remained significantly less than that of healthy controls. These findings may indicate that auditory hallucinations in schizophrenia are associated with abnormal aspects of second-pass parsing process of information processing. Additionally, the present study casts doubts regarding the cognitive sparing effect of atypical antipsychotics, albeit they mediate symptom improvement.