Cognitive impairments, which are present at early stages of psychoses, are related to low functional outcomes [1]. Second generation antipsychotics may have different effects on cognition, although this remains uncertain [2]. The purpose of the present study was to compare the effect of different second generation antipsychotics on the cognitive performance in patients with a first episode of psychosis.

Our results suggest that olanzapine has a better cognitive profile than other second generation antipsychotics. Of all cognitive domains, Speed of Processing, Attention/Vigilance, Visual Learning and Reasoning and Problem Solving seem to be more clearly affected by antipsychotic treatment.

RESULTS

The mean (standard deviation) PANSS scores of the sample were: PANSS-P = 10.2 (3.8); PANSS-N = 14.5 (5.4); PANSS-G = 24.9 (7.7). There were no significant differences in PANSS scores between treatments. Of all patients, 10 were not receiving antipsychotic drugs, 36 were on monotherapy (17 risperidone/paliperidone, 13 olanzapine, 6 aripiprazole) and 8 on polytherapy. Antipsychotic drug doses were transformed into equivalents of chlorpromazine (in mg per day).

MCCB T-scores by antipsychotic groups are described in Table. Subjects with olanzapine performed better than those subjects on polytherapy in SOP, AV and visual learning. In AV, those subjects on olanzapine performed better than those with risperidone/paliperidone.

In the multiple regression analyses, adjusted by diazepam and biperiden, olanzapine was significantly associated with a better performance in SOP (B=0.383, p=0.032), visual learning (B=0.394, p=0.029), and RPS (B=0.477, p=0.007). Risperidone or paliperidone were associated with a poorer cognitive performance in the AV domain (B=-0.400, p=0.041). We found no significant differences related to the Overall Composite Score, although olanzapine showed a trend towards significance (B=0.356, p=0.055).

CONCLUSIONS

Our results suggest that olanzapine has a better cognitive profile than other second generation antipsychotics. Of all cognitive domains, Speed of Processing, Attention/Vigilance, Visual Learning and Reasoning and Problem Solving seem to be more clearly affected by antipsychotic treatment.