P.2.060 Antidepressant-type effects of olanzapine in modified FST in rats

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Introduction: Atypical antipsychotics (APS) have a broad spectrum of indications related or not "a priori" with psychotic states. In this sense, recently APS have been claimed to be useful in the treatment not only of psychotic depression (Rothschild et al., 1999) but also in some cases of resistant or major depression as monotherapy or associated to antidepressants (Shelton et al., 2001; Matthews et al., 2002). The mechanism of action involved in these effects is not known, although noradrenaline as well as dopamine or serotonine have been implicated. In animals, few or not studies have been carried out to test the efficacy of APS in behavioural tests predictive of antidepressant activity. The purpose of our study has been to test the putative antidepressant effects of olanzapine in a model predictive of antidepressant-like activity as the Modified Forced Swimming Test in Rats. The behavioural performances in this test (a modification of the classical Porsolt Test) are different among antidepressants with noradrenergic or dopaminergic properties and those with serotonergic activities.

Methods: Male Wistar rats (250–270 g) were paced in a glass with water during 5 minutes after 15 minutes of pre-test session performed 24 hours before. Three different forms of behaviour were recorded (over a 5 second intervals): immobility, swimming and climbing. Olanzapine (0.125–4 mg/kg, i.p.) or saline was administered 23.5 hours, 5 hours and 1 hour before the test.

Results: Olanzapine decreased significant and dose-dependently the immobility behaviour at 1, 2 and 4 mg/kg. Besides, olanzapine induced a significant and dose-dependent enhancement of climbing behaviour at 0.5, 1 and 2 mg/kg compared to saline.

Conclusions: The first conclusion that we can draw from this study is that olanzapine shows antidepressant-like effects in a test predictive of antidepressant activity. Moreover the effect of olanzapine is similar to that induced by desipramine, an effect that has been related to antidepressants with noradrenergic and/or dopaminergic properties. Thus, atypical antipsychotics may be an alternative to patients unresponsive to conventional antidepressant therapy.

References

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P.2.061 Long-acting risperidone injection improves and maintains quality of life in patients with schizophrenia

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Background: Second generation antipsychotics (Csernansky et al., 2002) are associated with improved outcomes and a better safety profile than oral conventional agents, particularly with regard to extrapyramidal symptoms. These benefits also translate into improved quality of life (QoL) for patients. Until now, however, these agents have only been available in short-acting formulations. Long-acting risperidone is the first long-acting injectable formulation of a 2nd generation antipsychotic.

Objective: The aim of this study was to measure the benefits of treatment with long-acting risperidone on QoL in patients with schizophrenia. Data on QoL were collected at baseline and every 3 months thereafter in a 1-year, multi-center, open-label study.

Methods: A 1-year, multi-center, open-label study was conducted in 725 patients with schizophrenia or schizoaffective disorder. Patients were required to be symptomatically stable on a stable dose of antipsychotic medication at the last month prior to screening. 615 patients with schizophrenia received at least one injection of long-acting risperidone 25, 50 or 75 mg/14 days. QoL was measured using the Short-Form 36 (SF-36) questionnaire, which consists of eight domains: physical functioning (PF) role-physical (RP), bodily pain (BP), general health (GH), vitality (VT), social functioning (SF), role-emotional (RE) and general mental health (MH). Scores range from 0 to 100, with higher scores indicating better quality of life. Domains relating to physical health (PF, RP, BP, GH) and mental health (VT, SF, RE, MH) can be combined to form the physical component summary (PCS) and mental component summary (MCS) score, which are scored in a way that 50 would be considered normal for the general population. SF-36 scores were collected at baseline, week 12, week 24 week 36, week 50 and endpoint.

Results: With a baseline value of 47.8, the PCS score was close to normal and remained unchanged at endpoint when using a last observation carried forward analysis. The baseline MCS score was 42.0, and a significant improvement from baseline was observed at week 12. Further improvement in MCS scores was seen at week 24. MCS scores remained significantly improved from baseline at all time points, including endpoint ($P<0.01$). In 5 of the 8 domains of the full scale (RP, GH, VT, SF, RE), statistically significant improvements were observed at week 50. At endpoint, this was still the case for 2 mental health domains (VT, SF). Results is these domains were robust with significant improvements at all time points except week 12 for SF.

Conclusions: Quality of life was improved and maintained on treatment with long-acting risperidone injection in symptomatically stable patients with schizophrenia. The most pronounced improvement was observed in the mental health domains.