

P0284

Neuroprotective effect of haloperidol, sulpiride, ziprasidone and olanzapine at hippocampal and frontal cortex at rats

D. Marinescu, L. Mogoanta, T. Udristoiu, I. Udristoiu. *University of Medicine and Pharmacy of Craiova, Craiova, Romania*

Background and Aims: The evaluation of the differential neuroprotective action of antipsychotics, objectivized through the alteration of hippocampal and prefrontal structures in an experimental study at Common Wistar rats. The neurobiological model of the glucocorticoid aggression is validated on the animal model for stress.

Methods: We formed 10 study lots each constituted of 5 male adults rats, weighting 200–250 g, held through the study duration (10 days) in temperature, humidity, food and ambient stressless conditions. The studied substances were administrated intraperitoneal, daily, for 10 days, saline solution equivalent to: olanzapine (0.15mg/kg/day) and ziprasidone (1.25mg/kg/day) single dose at 20:00 hours and haloperidole (0.20mg/kg/day), dexametason (0.20mg/kg/day) and sulpiride (8mg/kg/day) in two equal doses, at a 12 hour interval (08:00 – 20:00).

The rats were sacrificed during the 10th day, at 6 hours after the last substance administration. The sample brain was histopathologically processed and studied with optical microscopy.

Results: Frontal cortex and hippocamp were the most intensely affected to the haloperidole and dexametason in contrast with atypical antipsychotics (sulpiride, ziprasidone, olanzapine), presented significant lesser structural changes in frontal cortex and hippocamp.

The lots treated with dexametason and sulpiride and dexametason and ziprasidone are lesser affected at the cerebral structure level than the dexametason and olanzapine treated lot.

Conclusions: Haloperidole has a significant decrease in neuroprotection.

Atypical antipsychotics demonstrated a neuroprotective effect.

The dexametason animal model of stress is similar to the clinical model of schizophrenia evolution with multiple relapses in which neuroprotection seems to be significantly altered.

P0285

Clozapine in outpatient treatment of patients with non-responsive schizophrenia and depressive symptoms

E. Miceva-Velickoska¹, N. Manuseva¹, S. Bajraktarov², V. Calovska-Samardziska¹. ¹University Clinic of Psychiatry, Skopje, Macedonia ²Psychiatric Hospital *Skopje*, Skopje, Macedonia

Background and Aims: Clozapine is the first atypical antipsychotic with main indication in the treatment of refractory schizophrenia. The aim of this study was to explore clinical response to clozapine in patients with schizophrenia non-responsive to other antipsychotics and who also have symptoms of depression.

Methods: The descriptive retrospective study included 25 patients on clozapine followed up for 6 months period with clinical scales: BPRS and PANSS.

Results: The achievements obtained and described in remission of symptomatology and improvement in quality of life. A significant reduction in rehospitalization is reported and also in the use of services of psychiatric emergencies.

Conclusions: This form of treatment is beneficial and most appropriate for patients with refractory schizophrenia and depressive symptoms.

P0286

Assessing weight change of risperidone long – acting injectable treatment in dual diagnosis patients

Z. Natan, Y. Gimelfarb, E. Kaikov. *Abarbanel Mental Health Center, Bat Yam, Israel*

Background: The introduction of second generation antipsychotic (SGA) drugs represents a major advance in the treatment of schizophrenia. Concerns about the metabolic and cardiovascular adverse effects of the SGA, as opposed to first generation antipsychotic (FGA), have been disseminated. The benefits and risks of SGA have been studied with a focus on particular organ systems. Cardiovascular diseases are the leading cause for death in development countries. Weight gain and drug dependence are the risk factors for cardiovascular disease.

Concurrent comorbidity has become the rule among psychiatric inpatients. Unfortunately the majority of the clinical trials with SGA exclude the Dual Diagnosis patients (DDP). There is no evidence for examination of weight change during risperidone long-acting injectable (RLAI) treatment in DDP.

Aim: To compare the weight change in RLAI versus FGA-LAI treatment of DDP.

Methods: Twenty two DDP (21 (95.4%) males) meeting DSM-IV criteria for Schizophrenic spectrum disorders (median age=29 years [range, 21-39 years]).

BMI was determined by the dividing of weight by the square of height. The BMI was calculated for DDP who were treated by FGA-LAI or by RLAI treatment at baseline and after a period of 3 months.

Results: There were no significant differences between the groups before the treatment (NS). There was no significant weight change as opposed to baseline in each of the groups (NS).

Conclusions: Treatment of DDPs with RLAI is safe and does not increase the middle-term risk of weight change.

Key words: dual diagnosis patient, Risperidol Consta, weight, BMI.

P0287

Augmenting clozapine with sertindole - A case report

J. Nielsen. *Unit for Psychiatric Research, Aalborg Psychiatric Hospital, Aalborg, Denmark*

Background: Clozapine is still the drug of choice for patients with schizophrenia. However, there are still many patients not having a satisfied response to clozapine. In these patients clozapine is very often combined with other antipsychotics but the evidence for these combinations is poor. Due to the receptor profile of clozapine, the augmentation drug should be a non-sedating drug with no muscarinic affinity and still have a low propensity to cause EPS. Sertindole has not been investigated as an augmentation drug to clozapine.

Method: We present a 29 year old man with a treatment resistant schizophrenia. Currently he was treated with 400 mg of clozapine with a suboptimal response but was not able to tolerate a higher clozapine dose due to sedation. Sertindole 16 mg was instead added.

Results: The baseline PANSS total score was 123 and after 12 weeks it was reduced to 90. No subjective or objective side-effects were seen.

Conclusion: Sertindole might be an ideal augmentation drug to clozapine due to the receptor profile but whether the combination is

beneficial needs to be determined in a randomized double-blinded placebo trial.

P0288

Sudafed for sertindole-induced decreased ejaculatory volume

J. Nielsen. *Unit for Psychiatric Research, Aalborg Psychiatric Hospital, Aalborg, Denmark*

Sexual dysfunction is very common among patients with schizophrenia. Sertindole is a non-sedating atypical antipsychotic drug with a low incidence of extra pyramidal side-effects. Male patients treated with sertindole often complain of decreased ejaculatory volume. This might be due to the $\alpha 1$ noradrenergic antagonist properties of sertindole. Whether the decreased ejaculatory volume is due to a retrograde ejaculation or due to the fact that the vas deferens is not contracted is unknown. Decreased ejaculatory volume or dry orgasm can be very intimidating for patients with schizophrenia because it might lead to feelings of not being a male or in worst case delusions about disappearing of the semen.

We investigated whether pseudoephedrine (brand name SUDAFED) can reverse the decreased ejaculatory volume induced by sertindole. Pseudoephedrine is an over-the-counter medication used for nasal congestion. Pseudoephedrine is a sympathomimetic amine with $\alpha 1$ agonist properties and is sometimes used for retrograde ejaculation caused by $\alpha 1$ blocking drugs used for benign prostatic hyperplasia. Patients were asked about quality of orgasm, changes in ejaculation volumen and other sexual problems during treatment with sertindole.

P0289

Off-label use of atypical antipsychotics in the crisis intervention unit: An observational study

B. Novak Sarotar, N. Segrec. *Crisis Intervention Unit, University Psychiatric Hospital, Ljubljana, Slovenia*

Background and Aims: Antipsychotic medications are used for the treatment of schizophrenia and other psychotic disorders. The aim of our study was to assess the off-label use of atypical antipsychotics (AA) in the Crisis Intervention Unit (CIU), Ljubljana, Slovenia.

Methods: Hospital records of 105 consecutive patients that were admitted to the CIU in the period of 4 months (June – September 2007) were included to the retrospective observational study. Patients were screened for diagnosis (ICD-10), gender, age, suicidal behavior and for prescribed psychotropic medications. Off-label use of atypical antipsychotics for diagnoses other than psychosis was evaluated. We noted which specific antipsychotics were prescribed for specific diagnoses with their daily dosages transformed to chlorpromazine units (CPU).

Results: Most patients suffered for stress related disorders (48%), depression (32%), anxiety disorders (14%) and other disorders (6%). Gender ratio was in favour of women (77%). Average age of patients was 52,1 years. 27% of patients were admitted after the suicide attempt, 46% reported suicidal thoughts. Off-label use of AA was noted in 65% of patients who suffered from stress related disorders, in 36% of patients with depression and in 49% of patients with anxiety disorders.

Conclusions: Our results show that atypical antipsychotics are widely used for indications other than psychosis, even though the long-term effects of their use are not yet known and safety issues remain to be examined further.

P0290

Previously untreated patients with schizophrenia : The nnt for all causes of treatment discontinuation and the nnh for weight gain

D. Novick¹, J.M. Haro², D. Suarez². ¹ *European Health Outcomes Research, Lilly Research Centre, Erl Wood Manor, Windlesham, UK* ² *Sant Joan de Deu-SSM, Fundacio Sant Joan de Deu, 08830 Sant Boi de Llobregat, Barcelona, Spain*

Background and Aims: To compare the relative effectiveness and tolerability profile, in terms of Number Needed to Treat (NNT) for all causes of medication discontinuation and Number Needed to Harm (NNH) for 7% of increased of body weight of olanzapine, risperidone, typical (oral and depot) and other atypical antipsychotic medications (quetiapine and amisulpride) in previously untreated outpatients with schizophrenia during 36-month follow-up.

Methods: NNTs (NNHs) mean the number of patients needed to be treated with one antipsychotic instead of another to prevent (produce) one negative outcome.

Previously untreated patients with schizophrenia were defined as patients who i) had never received antipsychotic treatment for schizophrenia and ii) had not received antipsychotic treatment in the 6 months prior to study inclusion. Rate of medication discontinuation for any cause during the 36 months post initiation was calculated for olanzapine (28.9%), risperidone (36.2%), typicals (44.5%) and other aypicals) (34.7%). Cox and logistic regression models were employed to adjust for treatment group differences at baseline and NNTs and NNHs with their 95% confidence intervals were calculated.

Results: The NNTs for all-cause discontinuation of olanzapine were: 12.2.(95% CI: 5.8; 229.7) for olanzapine vs. risperidone, and 6.2 (3.1 ; 37.8) for olanzapine vs. typicals. The NNH for 7% weight gain was -3.7 (-2.6 ; -9.5) for olanzapine vs. typicals.

Conclusions: Treatment effectiveness and tolerability varied among medications. The NNTs for olanzapine therapy were consistently better when compared to other treatment cohorts. The weight-gain NNHs for olanzapine treatment were less favourable when compared to other antipsychotic medications.

P0291

Maintenance pharmacotherapy of schizophrenia-long acting risperidone

I. Popovic, V. Popovic, M. Petrovic. *Special Psychiatric Hospital, Gornja Toponica, Nis, Serbia and Montenegro*

Schizophrenia remains a severe disorder that is associated with a poor outcome in a large subgroup of patients. Major efforts should be made to improve treatment, especially in the long-term psychopharmacotherapy. In this study, we followed 10 patients on the post-hospital ambulatory treatment with long acting Risperidone (LAR) during the six months period.

We discussed the results according to: age, schizophrenia type, LAR- dose (25 mg, 37.5 mg, 50 mg), relapse with hospitalization, and therapeutically compliance (meaning satisfaction with the therapy and regular two- weeks controls), also the improvement on the CGI score.

The CGI improvement scores were significant, as so as compliance with the therapy. Only two patients have relapsed during the study. These results encourage us to believe that many more patients will benefit from the advantages of a second generation of long acting preparations, like Rispolept Consta is.