Results: Under low glucose, as compared with the blank control group, inhibitive effect on [Ca2+]i in cells was found in clozapine group and desmethyl-clozapine group respectively ($P<0.01$); As compared with the base line(0min), [Ca2+]i in cells was decreased according to the prolonging of time in clozapine group and desmethyl-clozapine group ($P<0.05$; 0.01), and the inhibitive effect of clozapine was more intensive than desmethyl-clozapine ($P<0.01$). Under high glucose, as compared with the blank control group, inhibitive effect on [Ca2+]i in β-cells was also found in clozapine group and desmethyl-clozapine group respectively ($P<0.01$); As compared with the base line(0min), [Ca2+]i in cells was also decreased according to the prolonging of time in clozapine group and desmethyl-clozapine group ($P<0.05$; 0.01), but the inhibitive effect of desmethyl-clozapine was more intensive than clozapine ($P<0.01$). However, no effect was found in clozapine N-oxide group under low or high glucose ($P>0.05$).

Conclusion: Clozapine and desmethyl-clozapine both inhibit [Ca2+]i in cells of isolated rat islets so that they can inhibit insulin secretion.

Key words: Clozapine; Biotransformation; Islets of Langerhans; Calcium

P0281

Prevalence of neuroleptic-induced movement disorders in psychotic patients within peripheral New Zealand mental health services: Ethnic variation

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Background and Aims: This study investigated the point prevalence of extrapyramidal movement disorders in patients with chronic schizophrenia and related disorders who are currently treated by Northland District Health Board (DHB) mental health services, New Zealand. The study also investigated evidence of variation in the point prevalence of these disorders based on the ethnicity of the patients (indigenous Māori patients and non-Māori).

Methods: 151 patients, who had received antipsychotic medication for 3 months or more, were recruited as participants for the study using randomised computer software. Ethnicity was documented using self-identification. Akathisia was assessed using the Barnes Akathisia Rating Scale (BARS). The Abnormal Involuntary Movement Scale (AIMS) was used to assess tardive dyskinesia and extrapyramidal side effects (EPSE) were assessed by the Simpson-Angus Rating Scale (SAS).

Results: 9.3 % had akathisia using Barnes scale, 43% had Parkinsonian symptoms on SAS scale, and 18.5 % had tardive dyskinesia using AIMS scale. The analysis failed to show any statistically significant differences based on ethnicity (indigenous Māori and non-Māori). $P = 0.284$, 0.176, and 0.201 for Barnes, SAS and Aims respectively.

Conclusions: The findings suggest that the prevalence of neuroleptics-induced movement disorders in psychotic patients within Northland DHB (9%-43%), is similar to the documented international figures. These findings also indicate that there is no significant difference based on ethnicity between Māori and non-Māori in terms of movement disorders profile.

P0282

Association of venous thromboembolism and olanzapine

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Aims: Venous thromboembolism (VTE) has been associated with the diagnosis of a psychiatric disease, as well as with the treatment with psychotropic drugs. Recent reports suggest an association between several atypical antipsychotics agents (eg. olanzapine) and an increased risk for VTE.

Methods: We prospectively analysed and consequently followed-up olanzapine users in a cohort of 138 consecutive patients under 60 years of age (male=72, mean age 45 years) suffering from objectively confirmed VTE over a three-year period (2004 - 2006). Data on known acquired or genetic risk factors for VTE were recorded for each patient.

Results: Four Caucasian patients (one female, three males; mean age 49 years, range 37-55 years) with spontaneous VTE treated with olanzapine were registered. Two patients were obese. The hospitalization was extended in the female patient. We found coagulation abnormalities in all our subjects (elevated levels of factor VIII:C, mild hyperhomocysteinemia, FV Leiden and prothrombin gene G20210A mutations).

Conclusions: These cases indicate that VTE might be associated with the use of olanzapine, at least in the presence of several acquired or inherited risk factors such as immobilization, obesity and disorders of coagulation homeostasis including factor V Leiden, prothrombin gene G20210A mutations, high levels of factor VIII and hyperhomocysteinemia. Subjects treated with olanzapine should be monitored clinically for VTE. Interestingly, in three patients symptoms occurred in the first six months of olanzapine treatment.

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P0283

Atypical antipsychotics in epilepsy

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Epilepsy is a neurological disease, always associating psychiatric troubles; these last ones can be permanent – unstable affect, dementia, or transient – delusions, hallucinations. Treatment in these patients is often difficult, because many antipsychotics may determine motor seizures and/or electroencephalographic changes.

Method: We considered a sample of 35 epileptic patients (21 male and 14 female) with psychotic features, treated with specific antiepileptics and atypical antipsychotics (risperidone, olanzapine, quetiapine). It is well known that DA mediators partially inhibit motor seizures.

Results: During one year, none of our patients related any increase of the frequency of seizures. Also, we did not highlight electroencephalographic changes in this period. Clinically, patients were assessed using PANSS scale.

Conclusion: Atypical antipsychotics can be safety utilized in patients with epilepsy, ascertaining a good control of psychotic features, without worsening neurological symptomatology.

P0284

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

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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 glucorticoid aggression is validated on the animal model for stress.

Methods: We formed 10 study lots each constitued 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 substancies 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), dexametasone (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 dexametasone in contrast with atypical antipsychotics (sulpiride, ziprasidone, olanzapine), presented significant lesser structural changes in frontal cortex and hippocamp.

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

Conclusions: Haloperidole has a significant decrease in neuroprotection.

Atipical antipsychotics demonstrated an neuroprotective effect.

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

P0285

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

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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 achievments 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

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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, Risperidal Consta, weight, BMI.

P0287

Augmenting clozapine with sertindole - A case report

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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 muscarinergic 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

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