he undergoes during the psychotic experience. The subjective perception of change is a position that can easily lead to connect with painful and depressive feelings, so it can be assumed that subjective insight could be related more consistently with the depressive symptoms than the clinical insight.

Methods: Observational cross-sectional study of a group of 114 schizophrenia patients treated in the psychiatry devices of the Parc de Salut Mar and Parc Taulí Instruments: SUMD, Markova and Berrios Scale and Calgary scale for depression in psychosis.

Results: Subjective insight is significantly correlated with Lindenmayer's depressive factor and depression level measured by a Calgary scale.

Clinical insight correlates with positive and excitatory symptoms. The time of evolution explains the non-awareness of the social consequences of the disease.

Discussion: The subjective insight into schizophrenia is mainly related to the depressive symptoms. The clinical insight into schizophrenia is related to positive symptoms.

S219. RISK FACTORS FOR LOW BONE MINERAL DENSITY IN PATIENTS TAKING ANTIPSYCHOTICS

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Background: The aim of this study is to explore potentially modifiable risk factors for low bone mineral density (BMD) in adults with psychotic disorders. Furthermore, we sought to identify gender-specific risk factors.

Methods: The study included 285 community-dwelling patients with psychotic disorders. Dual-energy x-ray absorptiometry was used to measure BMD. Laboratory examinations included vitamin D and prolactin levels. Low BMD was defined as<1 standard deviation below the mean for young adults. Clinical characteristics associated with low BMD were identified with logistic regression analysis in total population and each gender.

Results: Fifty-eight (20.4%) subjects had low BMD. Low BMD was more common in men and in patients with low body mass indices (BMIs), as well as in those with shorter treatment durations, those on Medicaid, and patients using serotonergic antidepressants. Logistic regression analysis revealed that low BMD was negatively associated with BMI and treatment duration and positively with gender (male) and serotonergic antidepressants use in the overall population. In men, low BMD was associated with treatment duration and BMI; in women, low BMD was associated with BMI, prolactin level, vitamin D, and serotonergic antidepressant use.

Discussion: Low BMI was risk factor for reduced BMD in both genders. Shorter treatment duration was associated with low BMD in men, whereas higher prolactin levels, lower vitamin D, and the use of serotonergic antidepressants were associated with low BMD in women. Psychotropic agents should be prescribed mindful of their effects on bone, as use of these medications is a modifiable risk factor for osteoporosis in women with psychotic disorders.

S220. BLONANSERIN AUGMENTATION IN PATIENTS WITH SCHIZOPHRENIA – WHO IS BENEFITED FROM BLONANSERIN AUGMENTATION? AN OPEN-LABEL, PROSPECTIVE, MULTI-CENTER STUDY

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Background: Evidences for antipsychotic augmentation for schizophrenic patients with sub-optimal efficacy have been lacking although it has been widespread therapeutic strategy in clinical practice. The purpose of this study was to investigate the efficacy and tolerability of blonanserin augmentation with an atypical antipsychotics (AAPs) in schizophrenic patients.

Methods: A total of 100 patients with schizophrenia partially or completely unresponsive to treatment with an AAP recruited in this 12-week, open-label, non-comparative, multicenter study. Blonanserin was added to existing AAPs which were maintained during the study period. Efficacy was primarily evaluated using Positive and Negative Syndrome Scale (PANSS) at baseline, week 2, 4, 8, and 12. Predictors for PANSS response (≥20% reduction) was investigated.

Results: The PANSS total score was significantly decreased at 12 weeks after blonanserin augmentation (-21.0 ± 18.1, F=105.849, p<0.001). Response rate on PANSS at week 12 was 51.0%. Premature discontinuation was occurred in 17 patients (17.0%) and 4 patients among them discontinued the study due to adverse events. Nine patients experienced significant weight gain during the study. Response to blonanserin augmentation was associated with severe (PANSS>85) baseline symptom (OR=10.298, p=0.007) and higher dose (>600mg/day of chlorpromazine equivalent dose) of existing AAPs (OR=4.594, p=0.014).

Discussion: Blonanserin augmentation improved psychiatric symptoms of schizophrenic patients in cases of partial or non-responsive to an AAP treatment with favorable tolerability. Patients with severe symptom despite treatment with higher dose of AAP were benefited from this augmentation. These results suggested that blonanserin augmentation could be an effective strategy for specific patients with schizophrenia.

S221. QUANTITATIVE SYSTEMS PHARMACOLOGY AS AN ALTERNATIVE TO CHLORPROMAZINE EQUIVALENTS: PREDICTIVE VALIDATION FROM A CRIS DATABASE EXPERIMENT

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Background: Polypharmacy is common in real clinical practice and in pharma-sponsored clinical trials. Chlorpromazine equivalents do not take into account pharmacodynamic interactions of drug combinations. If there is a sufficiently deep calibration set available, bio-informatics approaches can build classifiers for clinical phenotypes. However, this is not always the case which severely limits the generalizability of the predictions.

Methods: We applied a mechanism-based computer model of a cortico-striatal-thalamocortical loop of the dorsal motor circuit that has been calibrated with clinical data on the prevalence of extrapyramidal symptoms after antipsychotic treatment in schizophrenia patients and therapeutic interventions in Parkinson's patients[1]. The Quantitative Systems Pharmacology (QSP) model is based on the appropriate connections between basal ganglia regions and consists of 220 neurons (8 different cell types), 3500 synapses and implementations of 32 CNS active targets, based on their unique locations and coupling with intracellular pathways. Modulation of the various CNS targets were calculated on simulating the competition between the endogenous neurotransmitter and the two drugs at their appropriate concentrations and affinity.