functionality at follow-up is specifically associated with the avolition factor in our study, in accordance with previous studies.
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M45. EFFICACY AND SAFETY OF THE ASENAPINE TRANSDERMAL PATCH, HP-3070 (SECUADO©), FOR SCHIZOPHRENIA: A PHASE 3, RANDOMIZED, PLACEBO-CONTROLLED, INPATIENT STUDY

Abstract not included.

M46. THE STUDY OF HEART RATE VARIABILITY AND EMOTIONAL RESPONSE TO POSITIVE AND NEGATIVE AUDIOVISUAL STIMULATION IN PATIENTS WITH SCHIZOPHRENIA

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Background: This study was to investigate the Heart Rate Variability (HRV) and emotional response to positive and negative audiovisual stimulation in patients with chronic schizophrenia and healthy control group.
Methods: Among 253 chronic schizophrenic patients, 104 patients were informed about this research and consented. 35 healthy control consisted of peoples that did not have past and present history of mental and physical illness. Positive and negative affect and HRV were compared between chronic schizophrenia and healthy control groups, and positive and negative affect and HRV to positive and negative audiovisual stimulation were measured. Positive and negative audiovisual stimulation was defined by an art therapy professionalist and a psychiatrist as 10 positive and negative pictures. 3 positive and negative musics were shown to two groups for 4 minutes simulta¬neously. Positive and negative audiovisual stimulation were shown to two groups during 1-week intermission. HRV was measured with Ubpulse H3, an equipment for autonomic nervous system test made by Laxtha company and also analyzed by frequency domain analysis. Emotional Empathy Scale(EES) and Positive Affect and Negative Affect Schedule (PANAS) of two groups were measured at baseline and after positive and negative audiovisual stimulation. Global Assessment of Functioning Scale(GAF) and Positive and Negative Syndrome Scale(PANSS) of chronic schizophrenia group were measured by a psychiatrist.
Results: Positive affect of patients group were significantly lower than control group, negative affect of patients group were significantly higher than control group. Low Frequency (LF), High Frequency (HF), and Total Power (TP) of HRV in patients group were significantly lowered than control group at baseline. 7 subscales of emotional empathy scale were lowered in patients group compared to control group. Positive affect of patients group was significantly less increased compared to the control group after positive audiovisual stimulation, negative affect of patients group was significantly less decreased to the control group after positive audiovisual stimulation. Positive affect of patients group was increased after negative audiovisual stimulation, but positive affect of control group was significantly decreased compared to the patients group after negative audiovisual stimulation. There was no significant difference in negative affect between two groups after audiovisual stimulation. LF of patients group was significantly higher than control group after positive audiovisual stimulation, HF and TP of patients group were significantly lowered than control group after positive audiovisual stimulation. LF of patients group was significantly higher than control group after negative audiovisual stimulation, HF and PT of patients were significantly lowered than control group after negative audiovisual stimulation.
Discussion: Audiovisual stimulation in integrative arts therapy program for schizophrenia might have avoid overactive sympathetic stimulation and recommend activate parasympathetic stimulation. Integrative art therapy for schizophrenia must be sufficiently relaxed, empathetic, and promote positive affect during therapeutic process.

M47. AKATHISIA AND ATYPICAL ANTIPSYCHOTICS: EXPLORING ASSOCIATIONS TO SUICIDALITY AND AGITATION

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Background: Antipsychotic associated akathisia is a highly relevant clinical phenomenon. The common side effect can be stigmatizing, cause subjective distress and depression, lead to medication noncompliance and be potentially disabling for patients with psychosis. Associations between akathisia and both suicide, depression and agitation has been suggested in research literature, but inconsistently. This study investigates the level of akathisia at hospital discharge/first follow-up for consecutively admitted patients with acute phase psychosis, comparing four atypical antipsychotics (AAPs) regarding the presence of akathisia, and explores possible associations between akathisia and both suicidality, depression and agitation.
Methods: This study is a sub-study of the Bergen Psychosis Project (BPP), a pragmatic, rater-blind, randomized trial comparing head-to-head ziprasidone, olanzapine, risperidone and quetiapine. The present study reports cross-sectional data at discharge/first follow-up after acute admission to hospital for patients with psychosis. Patients were assessed with The Positive And Negative Syndrome Scale (PANSS). We applied the validated PANSS Excited Component (PANSS-EC) factor to assess agitation. The PANSS-EC consists of the five PANSS items: P4 Excitement, P7 Hostility, G4 Tension, G8 Uncooperativeness and G14 Poor impulse control. To assess depression in general and suicidality specifically we used the validated Calgary Depression Scale for Schizophrenia (CDSS).Furthermore the Clinical Global Impression – Severity Scale (CGI-S), and the patient-administered version of the UKU Side Effect Self-Rating Scale (UKU SERS Pat).
Results: A total of 109 patients were included of which 35 (32.1 %) were females, mean age was 34.0 (12.4). The mean total PANSS score was 54.9 (14.4), the mean CGI-S was 3.7 (1.1) and the mean total CDSS score was 3.9 (4.0). Our preliminary results show that a total of 58 (53.3%) patients had used antipsychotics before entering the study. Some level of akathisia was reported by ¼ of the patients, meaning a score of 1 or more on the UKU SERS Pat. There was a statistically significant difference between ziprasidone and olanzapine, with higher akathisia level in the ziprasidone group. Furthermore, there were statistically significant correlations between akathisia and suicidality and between akathisia and depression. We found no significant correlation between akathisia and the PANSS-EC factor or between akathisia and the PANSS general item G14 Poor impulse control. Statistical details will be presented on the poster.

Discussion: Our study shows that akathisia is a prevalent side effect in a clinically relevant sample of patients with acute phase psychosis treated with atypical antipsychotics. The prevalence of antipsychotic associated akathisia ranges widely across studies due to, among others, methodological heterogeneities and varieties in measurement tools. In our study, akathisia was significantly associated with both depression and suicidality. The finding of a significant correlation between akathisia and suicidality supports a previous finding that even a mild to moderate experience of akathisia in first episode patients had an increase in the likelihood to be suicidal. We found no relationship with agitation in our study. As akathisia may go unrecognized in clinical practice and may contribute to medication noncompliance, systematic assessment for symptoms of akathisia is warranted.
Conclusion: Akathisia is still a prevalent phenomenon in a substantial proportion of patients treated with atypical antipsychotics. Special attention is called for regarding the association towards suicidality.

M48. IS METABOLIC SYNDROME RELATED TO COGNITIVE PERFORMANCE IN PATIENTS WITH SCHIZOPHRENIA? RESULTS FROM A DOUBLE-BLIND, ACTIVE-CONTROLLED, LURASIDONE STUDY

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Background: Schizophrenia is associated with cognitive dysfunction as well as cardiovascular disease (CVD).
A central risk factor for CVD is the metabolic syndrome (MetS), which is of special concern in schizophrenia.
The prevalence of MetS in U.S. patients with schizophrenia is higher versus general population (32.5% versus 23%). The prevalence of MetS and diabetes mellitus (DM) in those with schizophrenia double that of the general population. Adverse events of some antipsychotics used to treat schizophrenia include weight gain, obesity and other MetS complications, particularly abnormal glucose and lipid metabolism. Patients with schizophrenia have low rates of treatment for MetS and its components.
Furthermore, components of MetS are risk factors for cognitive impairment and dementia in the general population. Cognitive impairment is a hallmark feature of schizophrenia, and the level of community functioning is strongly correlated with the degree of cognitive impairment.
Given the importance of cognitive impairment in schizophrenia, the potential role of MetS in contributing to cognitive dysfunction is important.
The objective of this post-hoc analysis was to examine cross-sectional relationships between metabolic syndrome and cognitive performance in patients with schizophrenia treated with lurasidone or quetiapine XR for 6-weeks.
Methods: This post hoc analysis utilized data from 6-week, double-blind, placebo-controlled trial of patients with an acute exacerbation of schizophrenia who were randomized to fixed, once-daily oral doses of lurasidone 80 mg (LUR 80 n=125), lurasidone 160 mg (LUR 160, n=121), quetiapine XR 600 mg (QXR, n=120) and placebo (PBO, n=122). Patients with metabolic syndrome (MetS) at baseline were identified based on the National Cholesterol Education Program – Adult Treatment Panel III criteria (NCEP-ATP-III).
Cognitive performance and functional capacity were assessed by the CogState computerized cognitive battery at baseline and 6 weeks.
Results: In the acute 6-week period, LUR160 was significantly superior on the cognitive composite score to PBO ($p<0.05$, $d=0.37$), while LUR 80 and QXR did not separate from PBO in the evaluable analysis sample (excluding subjects with non-evaluable composite Z-scores; n=267).
A total of 45/267 (16.9%) patients met criteria for MetS.
Treatment of patients with MetS group with LUR 160 (vs placebo) was associated with significantly greater week 6 improvement in the cognitive composite score ($p<0.05$, $d=1.15$), while LUR 80 and QXR did not separate from PBO.
In the group without MetS, LUR dose groups and QXR did not differ from PBO in the CogState composite score.
In the analysis of cognitive domain scores, LUR 80 was significantly superior to PBO on working memory in the group with MetS ($p<0.05$, $d=1.01$) and reasoning/problem solving in the group without MetS ($p<0.05$, $d=0.46$).
LUR 160 was significantly superior to PBO on processing speed in the group with MetS ($p<0.05$, $d=1.20$), reasoning/problem solving ($p<0.05$, $d=0.45$) and social cognition ($p<0.05$, $d=0.46$) in the group without MetS.
QXR was significantly superior to PBO on verbal learning and reasoning/problem solving in the group without MetS ($p<0.05$, $d=0.38$ and $p<0.05$, $d=0.37$, respectively).
Discussion: Patients with MetS responded to treatment with lurasidone with significantly improved CogState composite and domain scores. No improvement on cognition was seen in patients with MetS treated with QXR. Evaluation of potential for MetS and improvements in cognition should be important elements in the algorithm of optimization of treatment in patients with schizophrenia.

M49. BEHAVIOURAL SOCIAL COGNITION IN SCHIZOPHRENIA SPECTRUM DISORDERS IN COMPARISON TO AUTISM SPECTRUM DISORDER: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Background: Schizophrenia spectrum disorders (SSDs) and autism spectrum disorder (ASD) both feature social cognitive deficits, which are highly debilitating. These include lower-level processes (e.g. emotion recognition), thought to be subserved by a frontoparietal mirroring network, and higher-level mentalizing processes (e.g. theory of mind), involving cortical midline and lateral temporal brain regions. Across both disorders, impairments in social cognition persist over time, drive disability, and predict functional outcome. Overlapping symptoms in SSDs and ASD have long been recognized, particularly in the realm of social deficits. However, despite some studies including both individuals with SSDs and ASD showing similar levels of social cognitive impairment, including lower-level and higher-level deficits, results are mixed. Thus, our objective was to determine based on the extant literature how deficits in social cognition diverge or overlap between individuals with SSDs and ASD by conducting a systematic review and meta-analysis of studies directly comparing these groups on behavioural social cognitive measures.
Methods: Literature searches were conducted in MEDLINE, Embase, PsycINFO, and Web of Science to identify articles that utilized behavioural measures to assess social cognition in both SSD and ASD samples. Of 3682 articles identified, 28 met all inclusion criteria. Across the accepted articles, lower-level (e.g. facial and/or context-embedded emotion recognition) and higher-level (e.g. intention understanding, perspective taking) social cognitive measures were identified, and random-effects meta-analyses were conducted for each category. A separate meta-analysis was also conducted for the Reading the Mind in the Eyes test given that it was the most commonly used social cognitive metric. Effect sizes were estimated using Hedges' g. Homogeneity of effects and publication bias were also assessed for each meta-analysis.
Results: A significant difference in lower-level social cognitive performance was found between individuals with SSDs and ASD, with the SSD group performing better than the ASD group (Hedges' $g = 0.30$, 95% CI [0.05, 0.56], $p = .018$). In contrast, there was no significant difference in