Results: Symptom improvements were not related to demographic variables except that a shorter duration of illness related to SANS improvement in the MINO group ($P = .04$). Baseline total BPRS was associated with greater BPRS reduction ($r = -0.51$, $P < .001$), stronger in the MINO group than in placebo (difference in line slopes ($F(1,45) = 5.13$, $P = .03$). A greater increase in IFN-gamma with MINO was associated with a greater decrease in BPRS positive symptoms ($r = -0.45$, $P = .02$). SANS total score improvement was associated with an increase in TNF-alpha ($r = -0.4$, $P = .045$) and a trend for increased IFN-gamma ($r = -0.38$, $P = .053$). Lastly, CLZ levels were not related to BPRS; however, a greater decrease in CLZ levels related to a improvement in the SANS total score in the MINO group ($r = 0.48$, $P = .01$). In the placebo group, higher total CLZ was associated with greater SANS (difference in line slopes $F(1, 42) = 4.43$, $P = .04$).
Conclusion: Variables associated with improvement on BPRS and positive symptoms include a higher baseline BPRS score and an increase in IFN-gamma levels. Variables associated with negative symptom improvement include shorter duration of illness, a decrease in CLZ levels, an increase in TNF-alpha, and trend for increase in IFN-gamma levels. These data suggest that despite MINO increasing CLZ levels (data not shown here) this does not contribute to MINO's treatment effect. More research is needed to help define predictors of treatment response to MINO in larger samples.

SU17. OXYTOCIN AND SEXUAL FUNCTION IN MALES AND FEMALES WITH SCHIZOPHRENIA

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Background: Oxytocin (OT) is known to be associated with social affiliative behaviors including intimacy and sexual behavior. With regard to sexual behavior, OT has demonstrated both stimulatory and inhibitory effects, as well being associated with sex-specific roles in social cognitive, social affiliative, and sexual behaviors. In schizophrenia, social affiliative function, including sexual behaviors, are often impaired. The current study assessed the relationship of serum OT levels to sexual behavior in males and females with schizophrenia and the effect of intranasal OT on sexual function.
Methods: Fifty-eight participants with either DSM-IV-TR schizophrenia or schizoaffective disorder were entered into a 6-week, double-blind randomized clinical trial of intranasal OT, galantamine, or placebo. The intranasal OT dose was 24 IU twice a day. The Arizona Sexual Experience Questionnaire (ASEX), a 5-item instrument rated on a range of 1 (enhanced) to 6 (markedly impaired), was used to assess baseline and end of study sexual function (scores 5–30). Baseline serum OT levels were determined via radioimmunoassay using a magnetic bead kit from Phoenix Pharmaceuticals, Inc.
Results: Mean ASEX scores at baseline were 21.4 ± 8.4 in the females ($N = 10$) and 18.6 ± 7.4 in the males ($N = 41$), indicative of a group with sexual dysfunction at baseline. We found no correlation of ASEX scores to serum OT levels in males; however, there were robust correlations in women, including the ASEX total score ($R = 0.73$, $P = .02$) and all 5 domains: sex drive ($R = 0.74$, $P = .01$), arousal ($R = 0.74$, $P = .02$), vaginal wetness ($R = 0.75$, $P = .01$), orgasm ($R = 0.63$, $P = .046$), and a trend for orgasm satisfaction ($R = 0.56$, $P = .09$). During the clinical trial, there were no significant changes in ASEX scores in any medication group; however, power to detect treatment effects was extremely low, especially in females.
Conclusion: Serum OT levels are not related to sexual behavior in males with schizophrenia; however, higher OT levels are associated with greater sexual dysfunction in females. We find no beneficial effect for OT on sexual dysfunction. These findings add to the accumulating data reporting sex-specific differences of OT. Sex-specific studies are needed to understand the complex function of OT on social affiliative behavior as higher OT levels may lead to worsening of social affiliation related to sexual interest in females with schizophrenia.

SU18. GLP-1 RECEPTOR AGONIST TREATMENT IN SCHIZOPHRENIA PATIENTS WITH OBESITY

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Background: Glucagon-like peptide-1 receptor agonists (GLP-1RAs) are registered for treatment of both obesity and type 2 diabetes, and we investigated metabolic and cognitive effects of the GLP-1RA, exenatide once weekly, in nondiabetic, antipsychotic-treated, obese patients with schizophrenia.
Methods: In this investigator-initiated trial, antipsychotic-treated, obese, nondiabetic, schizophrenia spectrum patients were randomized to double-blinded adjunctive treatment with once weekly subcutaneous exenatide ($n = 23$) or placebo ($n = 22$) injections for 3 months. The primary outcome was body weight loss after treatment. Secondary endpoints comprised blood pressure, biochemistry, measurements of body composition, and cognition.
Results: Forty patients completed the trial. At baseline, the mean body weight was 118.3 ± 16.0 kg in the exenatide group and 111.7 ± 18.0 kg in the placebo group, with no group differences ($P = .23$). After 3 months of treatment, the exenatide and placebo groups experienced significant ($P = .004$), but, similar ($P = .98$) weight losses of 2.24 ± 3.3 kg and 2.23 ± 4.4 kg, respectively. The exenatide group had a significant decrease in central 24-h systolic blood pressure of 6.8 mm/Hg ($P = .004$) and a decrease in the pulse wave velocity (a measure of arterial stiffness) of 0.3 m/s ($P = .007$). Changes in biochemistry, body composition, and cognition were similar in the groups ($P < .47$). Exenatide once weekly was well tolerated.
Conclusion: Treatment with exenatide once weekly did not promote weight loss in obese, antipsychotic-treated patients with schizophrenia compared to placebo. This suggests that the body weight-lowering effect of GLP-1RAs involves dopaminergic signaling and implies that antiobesity regimens effective in the general population may not be readily implemented in antipsychotic-treated patients with schizophrenia. ClinicalTrials.gov identifier: NCT01794429.

SU19. EFFECTS OF *N*-ACETYL-CYSTEINE AS AN ADD-ON TO STANDARD TREATMENT ON NEUROCOGNITION IN EARLY PSYCHOSIS

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