

(i.e. Clozapine + another atypical antipsychotic) in treatment resistant schizophrenia patients.

Methods: We conducted an observational study in a sample of 20 patients diagnosed with treatment resistant schizophrenia, based on DSM-5 diagnostic criteria and psychopharmacologic history. Treatment choices were taken independently by clinicians in charge of each patient. 10 subjects underwent Lurasidone augmentation of Clozapine, whereas the remaining 10 subjects were treated as usual with Clozapine and another atypical antipsychotic. PANSS and BPRS scales to assess general psychopathology and UKU side effects scale were administered both at baseline and at follow-up (T1= 1 month; T2=6 months).

Results: All patients treated with Lurasidone augmentation strategy achieved a significant reduction of both positive and negative symptoms, with no significant adverse effects to be reported. In particular, Lurasidone showed no impact on metabolic parameters nor on ECG features, namely the QTc interval. The psychopathological improvement appeared higher in patients who received Lurasidone than in those treated as usual. This was particularly evident in cognitive domains.

Conclusions: Our observation suggests that augmentation strategy with Lurasidone to Clozapine can lead to clinically significant improvements in psychopathology when compared to Clozapine combined with another atypical antipsychotic, with a good tolerability profile. In future we will increase the number of our sample and the duration of follow-up time. In order to have more relevant statistical results, further research on this topic is needed.

Disclosure of Interest: None Declared

EPP0369

Efficacy of betahistine in counteracting second-generation antipsychotics-induced weight gain: A meta-analysis with trial sequential analysis

Y. Soliman^{1*}, A. Azeez², W. Chibani³, A. Mamdouh⁴, B. Elawfi⁵, A. M. Sharkawy⁶, O. A. Abdelwahab⁷ and R. U. Awan⁸

¹Faculty of Medicine, Assiut University, Assiut; ²Faculty of Medicine, Tanta University, Almahalla Alkubrah; ³Faculty of Medicine, Cairo University, Cairo; ⁴Faculty of Medicine, Misr University for Science and Technology, Giza, Egypt; ⁵Faculty of Medicine, Sana'a University, Sana'a, Yemen; ⁶Faculty of Medicine, South Valley University, Qena; ⁷Faculty of Medicine, Al-Azhar University, Cairo, Egypt and ⁸Ochsner Health System, Mississippi, United States

*Corresponding author.

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Introduction: Despite being effective in schizophrenia, second-generation antipsychotics are potent histamine-H1 receptor antagonists associated with weight gain. Histaminergic agonists can potentially counteract the weight gain effects of antipsychotics. Betahistine is a centrally acting histamine-H1 agonist and, therefore, may reduce antipsychotic-induced weight gain, but it has never been examined in a meta-analysis.

Objectives: This meta-analysis aims to examine the efficacy of betahistine in counteracting the weight gain effects of antipsychotics.

Methods: We searched PubMed, Scopus, Web of Science, and Cochrane Controlled Register of Trials (CENTRAL) for all relevant

trials. We used Hedges' g with its confidence interval as our effect size to correct for the small sample size. The primary outcomes of this study were changes in weight and body mass index (BMI). Changes in insulin resistance and lipid parameters were secondary outcomes.

Results: 165 studies were included in the title/abstract screening, and 5 studies with 217 patients were finally included. Betahistine led to statistically significant changes in weight (Hedges' g -1.13, 95% CI [-1.66, -0.60], $p < 0.001$), BMI (Hedges' g -1.64, 95% CI [-2.39, -0.89], $p < 0.0001$), and waist circumference (Hedges' g -0.98, 95% CI [-1.47, -0.49], $p < 0.001$). Nevertheless, betahistine did not lead to any significant changes in fasting glucose (Hedges' g 0.02, 95% CI [-0.41, 0.44], $p = 0.94$) or insulin levels (Hedges' g -0.07, 95% CI [-1.78, 1.64], $p = 0.94$).

Conclusions: Betahistine is an effective add-on treatment for second-generation antipsychotics to counteract weight gain experienced with these medications. Further trials are recommended to examine its effect on blood lipids and side effects.

Disclosure of Interest: None Declared

EPP0370

Efficacy of probiotics and fibers on metabolic disturbances associated with antipsychotics: A systematic review and network meta-analysis

Y. Soliman^{1*}, N. I. Hendi², J. Magdy Daniel³, M. Emara⁴, N. M. Gharib⁵, O. A. Abdelwahab⁶ and R. U. Awan⁷

¹Faculty of Medicine, Assiut University, Assiut; ²Faculty of Medicine, Ain Shams University, Cairo; ³Faculty of Medicine, Menofia University, Menofia; ⁴Faculty of Medicine, Port Said University, Port Said; ⁵Faculty of Medicine, Alexandria University, Alexandria; ⁶Faculty of Medicine, Al-Azhar University, Cairo, Egypt and ⁷Ochsner Health System, Mississippi, United States

*Corresponding author.

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Introduction: Human gut microbiota plays an important role in metabolic health. Atypical antipsychotics can lead to metabolic abnormalities and changes in the gut microbiota. Multiple studies have examined the role of probiotics in suppressing antipsychotics-induced weight gain, but they have never been examined in a meta-analysis.

Objectives: This network meta-analysis aims to compare the effect of probiotics + fibers, probiotics only, and fibers only on metabolic abnormalities induced by atypical antipsychotics.

Methods: We searched PubMed, Scopus, Web of Science, and Cochrane Controlled Register of Trials (CENTRAL) for all relevant studies. We used mean difference with its 95% confidence interval as our effect size. Primary outcomes were body weight and body mass index (BMI), while secondary outcomes were changes in other cardiometabolic risk factors.

Results: We included 4 randomized controlled trials comprising 319 patients. For body weight, probiotics + fibers (MD -3.96, 95% CI [-5.16, -2.76]), fibers only (MD -1.91, 95% CI [-3.81, -0.01]), and probiotics only (MD -1.37, 95% CI [-2.07, 0.66]) were significantly superior to placebo. Probiotics + fibers (MD -1.52, 95% CI [-2.11, -0.92]), but not fibers only or probiotics only, was associated with significant changes in BMI. Probiotics + fibers was also associated