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SCHIZOPHRENIA Factsheet

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How is weight gain related to schizophrenia?

Many antipsychotic medications are associated with weight gain, and various adjunctive pharmacological approaches have been investigated for this problem. Effective adjunctive pharmaceutical treatments for side effects such as weight gain increase adherence to antipsychotic medications and reduces the risk of psychotic relapse.

What is the evidence for treatments for weight gain?

Moderate quality evidence finds a benefit of adjunctive metformin for reducing weight in adults and children with schizophrenia. Moderate to low quality evidence finds more weight reduction with metformin plus lifestyle intervention than placebo (less 5.05kg), metformin alone (less 1.5kg) or lifestyle intervention alone (less 3.30kg). Triglycerides, glucose, insulin and cholesterol levels may also be improved with metformin.

There were large effects of reduced weight and BMI with topiramate. There were also medium to large effects of improved triglycerides and low-density lipoproteins with topiramate. Lower quality evidence finds improvements with topiramate in fasting blood insulin, insulin resistance and systolic blood pressure. There were no improvements over placebo in total cholesterol, high density lipoproteins, leptin, fasting blood glucose and diastolic blood pressure.

Moderate quality evidence finds more weight reduction with adjunctive reboxetine or sibutramine than placebo. Glucagon-like peptide-1 receptor agonists also reduce weight, waist circumference and BMI, and improve haemoglobin A1c, glucose and visceral adiposity. Moderate to low quality evidence also finds benefits of adjunctive amantadine for weight reduction. Moderate to low quality evidence finds reduced BMI, but not weight with adjunctive ranitidine.

Moderate quality evidence suggests switching antipsychotic medications from olanzapine to aripiprazole or quetiapine may reduce weight and blood glucose levels.

There were no benefits for weight of adjunctive fluoxetine, risperidone, risperidone, nizatidine, norepinephrine, orlistat, or metformin + sibutramine, and no benefits for metabolic disturbances of adjunctive melatonin.

For more information see the technical table



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NeuRA (Neuroscience Research Australia) is one of the largest independent medical and clinical research institutes in Australia and an international leader in neurological research.

Diseases of the brain and nervous system pose the greatest health, economic and social burden of any disease group because they are chronic, debilitating and have no known cures.

Medical research is the cornerstone of efforts to advance the health and wellbeing of families and the community. Our dedicated scientists are focussed on transforming their research into significant and practical benefits for all patients.

While we hope you find this information useful, it is always important to discuss any questions about schizophrenia or its treatment with your doctor or other health care provider.

HOW YOUR SUPPORT HELPS

We are able to make significant advances due to the generosity of countless people. Your donation allows us to continue to work towards transforming lives. For information on how you can support our research, phone **1300 888 019** or make a secure donation at neura.edu.au/donate/schizophrenia.