

**EPV0850****Weight gain as a secondary effect of Olanzapine, and its interference in treatment adherence: a case report.**

P. Setién Preciados\* and E. Arroyo Sánchez

Psychiatry, Hospital Universitario Príncipe de Asturias, Alcalá de Henares, Spain

\*Corresponding author.

doi: 10.1192/j.eurpsy.2023.2153

**Introduction:** Olanzapine is a second generation antipsychotic that is approved for the treatment of schizophrenia, bipolar disorder type 1 as monotherapy, or as an add-on to lithium or valproate (manic or mixed episodes), and it is also used off label for acute anxiety, insomnia... It is one of the most effective antipsychotics but concerns remain due to its significant metabolic adverse effects. Olanzapine has one of the highest rates of weight gain among all antipsychotic drugs, which challenges patient's adherence to treatment.

**Objectives:** Review how much influence Olanzapine has on weight gain, its influence in treatment adherence and alternatives in clinical practice.

**Methods:** Presentation of a patient's case and review of existing literature, in regards to Olanzapine and its repercussions on weight gain and the old and new alternatives available right now.

**Results:** Olanzapine is an effective antipsychotic, however, it causes secondary effects that complicate treatment, especially weight gain. In the case presented, the patient does gain weight with Olanzapine and adherence is compromised. In these cases, professionals try to look for alternatives, either to try another drug or use adjunct treatment. In this patient, a change to lithium was made. In the last few years, adjunct treatment has gained traction, like for example: metformin and topiramate. The latest discovery in this matter are opioid antagonists: single dose oral tablet Olanzapine/samidorpham.

**Conclusions:** Even though Olanzapine is one of the most effective antipsychotics and medications in mental health, its impact on patients' weight hinders treatment continuity. The use of other already known medications and the appearance of new ones, that reduce weight gain probability, are the possible ways forward.

**Disclosure of Interest:** None Declared

**EPV0851****Myocarditis induced by clozapine and COVID-19 infection: a case report**P. Veloso<sup>1\*</sup>, M. Gomes<sup>1</sup>, R. Faria<sup>1</sup>, D. Matos<sup>2</sup> and F. Pereira<sup>1</sup><sup>1</sup>Psychiatry, Hospital de Braga, Braga and <sup>2</sup>Neurology, Unidade Local de Saúde do Alto Minho, Viana do Castelo, Portugal

\*Corresponding author.

doi: 10.1192/j.eurpsy.2023.2154

**Introduction:** Clozapine is the only available treatment for refractory schizophrenia and is rarely associated with the development of myocarditis. Usually, the onset of symptoms occurs within the first month of treatment. The symptoms of myocarditis include fever, flu-like symptoms, fatigue, and dyspnea, symptoms that overlap with the COVID-19 infection. Coronavirus has been associated

with cardiovascular complications, including myocarditis. It is not known whether clozapine increases the risk of developing viral myocarditis in patients with COVID-19 infection.

**Objectives:** Report a case of myocarditis in a patient treated with clozapine, who also had a history of COVID-19 infection.

**Methods:** Collection of clinical information and review of the literature.

**Results:** A 24-year-old man was admitted following severe psychotic symptoms that have been developing for the past several months. He presented with disorganized speech and behavior, paranoid delusions, thought alienation, auditory hallucinations, and blunted affect. He had no known medical co-morbidity, but he had tested positive for COVID-19 the month before admission. The lab and imaging tests and the electrocardiogram (EKG) were normal. He was diagnosed with schizophrenia and after treatment failure with three antipsychotics, the patient was started on clozapine, with symptom improvement. Two weeks after clozapine initiation, he started flu-like symptoms, fever, chest pain, and tachycardia. Lab tests showed leukocytosis (12 400 cells/uL), elevated inflammatory markers (C-reactive protein 143,30 mg/L) and cardiac biomarkers (troponin I 12.139 ng/mL, NT-proBNP 9321 pg/ml). The evaluation for viruses, including SARS-CoV-2, was negative. The EKG revealed ST-segment elevations and a trans-thoracic echocardiogram showed systolic dysfunction (left ventricular ejection fraction was 37%). Cardiac magnetic resonance confirmed severe left ventricular dysfunction and diffuse myocardial edema. The patient's symptoms resolved following the discontinuation of clozapine and supportive therapies. Troponin and EKG normalized over the following 7 days. By this time, the patient tested positive for COVID-19.

**Conclusions:** The temporal relationship with the initiation of clozapine supports the diagnosis of clozapine-associated myocarditis. However, the COVID-19 infection may have played a part in the emergence of cardiac alterations. We hypothesize that the co-occurrence of COVID-19 and clozapine treatment may act synergically as both factors increase the risk of developing myocarditis. However, further studies are needed to evaluate the relationship between these factors. While clinicians should stay alert for the risk of clozapine-associated myocarditis, the overall risk is low, and given the effectiveness of clozapine, as well as the absence of other evidence-based treatments, people with refractory schizophrenia should be given a monitored trial of clozapine, regardless of their COVID-19 status.

**Disclosure of Interest:** None Declared

**EPV0853****Mirtazapine-induced psychosis on a young patient with severe malnutrition**

R. T. E. Sollano\* and A. K. L. Enriquez

<sup>1</sup>Psychiatry, The Medical City - Ortigas, Pasig, Philippines

\*Corresponding author.

doi: 10.1192/j.eurpsy.2023.2155

**Introduction:** Mirtazapine is an antidepressant commonly prescribed to patients with depression and problems with weight and sleep. Case reports on Mirtazapine-induced psychosis either on initiation or increase in dosage in elderly patients and those with renal and liver impairment are found in the literature.