Conclusions: Metabolic changes in patients with shizophrenia who receive new antipsychotics in addition to their unfavorable lifestyle (improper diet, lack of physical activity, smoking) can lead to the development of metabolic syndrome and increase the risk for diabetes and cardiovascular diseases. It is therefore necessary to establish protocols for monitoring these risks and preventing comorbidities.

Disclosure of Interest: None Declared

EPV0929

The Challenge of Lorazepam Failure: Malignant Catatonia Treated Successfully with Valproate

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Introduction: Despite the unclear nature of catatonia, the treatment response of catatonia to benzodiazepines is widely known for its typical, dramatic recovery. The neurobiological correlates of this phenomenon regarding specific receptors and neurotransmitters are unclear, as are the potential treatment options. This is important to consider when the most commonly recommended treatments of catatonia with Lorazepam or Electroconvulsive Therapy (ECT) are unavailable or unsuccessful. In this report, we describe a case of severe, malignant catatonia and psychosis mostly unresponsive to Lorazepam during two different hospitalizations, but with eventual return to baseline after successful treatment with Valproate.

Objectives:

- To describe a unique case of malignant catatonia that was unresponsive to Lorazepam
- To illustrate the potential utility of Valproate as an alternative treatment strategy for catatonia

Methods: This is a case report.

Results: A 19-year-old Hispanic male presented to our hospital initially with family reports of severe and sudden depression with bizarre behavior. Prior to this admission, the patient had been discharged recently from another tertiary hospital following a 2-week admission for severe catatonia. Chart review from that admission scored the patient's Bush-Francis Catatonia Rating Scale (BFCRS) at 16, which remained mostly unchanged after numerous additional intramuscular doses and standing oral doses of Lorazepam, with a reduction of BFCRS the next day of only 2. During the patient's admission at our hospital, the patient endorsed bizarre, guilt-related delusions, and his catatonia was more severe and malignant with a BFCRS of 19, with tachycardia and diaphoresis. The patient was initially given a total of seven doses of a mix of intramuscular and oral Lorazepam (total 18mg), with a minimal 2-point reduction in BFCRS. As ECT was unavailable, Lorazepam was discontinued in favor of a trial of oral Valproate 500mg twice daily, and after his catatonia subsided (with a serum level of 60.8), he was started on oral Risperidone 0.5mg once at night, titrated up to 3mg twice daily, and eventually returned to baseline as confirmed by his family members.

Conclusions: The treatment of catatonia with Lorazepam is usually reliable and has been found to be up to 80% effective, but when the recommended use of benzodiazepines and ECT fail or are unavailable, there are few studies exploring the viability of alternative treatment options. With the use of Valproate, previous studies have shown it can treat even severe catatonia (KrÜger, J Neuropsychiatry 2001; 13:303-304), or can actually be its cause (Lauterbach, Neuropsychiatry, Neuropsychology, and Behavioral Neurology. 1998 Jul;11(3):157-163). As such, this case report highlights the importance of exploring alternative treatments for catatonia, including Valproate, in order to better tailor the management of this unique syndrome.

Disclosure of Interest: None Declared

EPV0930

Artificial intelligence and virtual reality applied to the clinical care of women with schizophrenia: A systematic review.

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Introduction: Artificial intelligence (AI) and virtual reality (VR) are useful tools that can improve precision medicine and can prove useful in the clinical care of patients with psychosis.

Objectives: Our aim was to determine whether AI and VR have been applied to the prediction of clinical response in women with schizophrenia.

Methods: A systematic review was carried out in PubMed and Scopus from inception to September 2023 by using the PRISMA guidelines. Search terms: ("artificial intelligence" OR "intelligent support" OR "machine intelligence" OR "machine learning" OR "virtual reality" OR "intelligent agent" OR "neural networks" OR "virtual reality" OR "digital twins") AND ("schizophrenia" OR "psychosis") AND ("women" OR gender"). Inclusion criteria: 1) English, French, German or Spanish language, 2) reporting treatment response in schizophrenia (as long as information in women was included), and 3) including AI and VR techniques.

Results: From a total of 320 abstracts initially screened (PubMed:182, Scopus:138), we selected 6 studies that met criteria.

- Prediction of treatment response. (1) Clinical information, genetic risk score and proxy methylation score have been shown to improve prediction models. (2) Graph-theory-based measures have been combined with machine learning.
- Therapeutic drug monitoring. (1) A machine learning model has been useful in predicting quetiapine blood concentrations.

- Pharmacovigilance. (1) Machine learning has connected prolactin levels and response in olanzapine-treated patients. (Zhu et al., 2022).
- Treatment-resistant schizophrenia (TRS). (1) Women with TRS have been found to receive clozapine less frequently than men (adjusted for sociodemographic, biological and clinical factors). (2) Statistical learning approach: Women have been found to respond better to clozapine than men.

Conclusions: AI, including machine learning, show promising results in the prediction of treatment response in women with schizophrenia. As of yet, digital twins have not been investigated to test specific interventions or to personalize treatment in women with schizophrenia.

Disclosure of Interest: None Declared

EPV0932

Differential diagnosis of acute psychosis after cocaine consumption: a case report

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Introduction: Psychosis is a common clinical presentation of mental disorder in many psychiatric patients, however, an etiological diagnosis is important when it occurs for the first time in a patient. Regarding a case seen in the Emergency Department recently, with major depression and acute cocaine use, a differential diagnosis was made after adequate organic screening. When presenting delusion of infestation after the consumption of the substance, the main hypothesis was what we call Ekbom syndrome. However, among other possibilities we consider a toxic psychosis or a major depression with psychotic symptoms.
Objectives: Review the different causes of acute psychosis and the importance of a good clinical history to achieve a specific diagnosis. Perform a differential diagnosis between the main causes of psychosis in a patient with depression who has recently consumed cocaine.
Methods: Presentation of the case and review of the available literature on the risk of developing psychosis after cocaine use and depression concomitantly.
Results: There is a low number of reported cases of delusional infestation after acute cocaine use, being more likely toxic psychosis or major depression with psychotic symptoms. A good anamnesis, with systematic questions about toxic habits, can lead us to a more accurate main hypothesis.
Conclusions: We mark the importance of a systematic anamnesis to achieve a better diagnosis, as well as a correct study by the clinician of the specific syndromes described in phenomenology such as Ekbom syndrome, to make a correct association of ideas in the differential diagnosis.

Disclosure of Interest: None Declared

EPV0933

Paliperidone LAI-Induced Leukocytopenia: A Case Report

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Introduction: Antipsychotics effectively manage psychotic symptoms but may have side effects. Patients with schizophrenia often lack insight into their condition, leading to nonadherence. Long-acting injectable (LAI) antipsychotics aim to overcome this, reducing relapse risks. Paliperidone LAI, a second-generation antipsychotic, has a lower side effect profile when compared to first-generation counterparts. Blood dyscrasias, like neutropenia and lymphopenia, increase infection susceptibility. This case report describes an instance of leukocytopenia arising during paliperidone LAI treatment, which quickly resolved after the discontinuation of the medication.
Objectives: This case report describes an instance of leukocytopenia arising during paliperidone LAI treatment, which quickly resolved after the discontinuation of the medication.
Methods:
Results: CASE
A 42-year-old female with schizophrenia, nonadherent to previously prescribed medication was admitted to our acute psychiatric department. She experienced positive symptoms (paranoid delusions), as well as disorganized thinking and behavior. Oral risperidone 4 mg two times a day was recommenced and titrated with mild improvement in her psychotic symptoms with the idea of switching to paliperidone LAI and eventually ceasing oral medication. Oral paliperidone was unavailable for prescription due to local restrictions. At admission her routine laboratory tests showed no abnormalities, but 5 days after receiving paliperidone LAI, routine laboratory tests showed a strong decrease in her WBC and absolute neutrophilic and lymphocytic count (Lkc 2.89x10^9/L, Neut 1.57x 10^9/L, Lym 0.88x 10^9 /L). Antipsychotic-induced blood dyscrasia was suspected and paliperidone depot was discontinued. The patient had rapid improvement in her WBC reaching the reference range in 10 days (Lkc 4.23 x 10^9/L, Neut 2.51x10 ^{9}/L, Lym 0.98x 10^9/L). Sertindole was introduced consdering her history of a good therapeutic response to the drug, with improvement in psychotic symptoms. She is currently stable taking sertindole 16 mg/day, clonazepam 2 mg/day and alprazolam 0.5 mg/day.
DISCUSSION
The onset of neutropenia and lymphopenia post-paliperidone LAI initiation, resolving in 10 days,, indicate a direct association. Few cases report to date describe paliperidone-induced leukocytopenia, with rapid recovery post-discontinuation. Proposed mechanisms include bone marrow suppression and peripheral WBC destruction. It has been proposed that drug-induced neutropenia is often dose-dependent, which could explain why our patient exhibited tolerability to risperidone but developed cytopenia upon transitioning to depot paliperidone.