

6-month follow-up, 4 patients discontinued clozapine due to serious adverse events. 18 patients successfully completed the follow-up. 50% of the TRS patients showed significant clinical response to clozapine, as described by >20% increase in PANSS score. Clozapine responders also showed a significant increase in functionality, as assessed by the elevation of the PSP score ($p < 0.001$), as expected. However, neither PSP score nor PANSS positive, negative or total score at baseline were predictive of clozapine response. Regarding the patients' sociodemographic data, no statistically significant differences were identified between clozapine responders and non-responders. This study is also in accordance with the existing literature suggesting a significant delay in clozapine prescription by physicians. In our study, 80% of patients were prescribed more than three different antipsychotics before clozapine was initiated.

Conclusions: Clozapine is an effective treatment for TRS, as supported by the preliminary results of our study. 50% of the TRS patients showed significant clinical response to clozapine, as shown by reduction in PANSS score, and increase in PSP score, as a measure of functionality. However, larger clinical samples are needed to showcase further, more delicate differences among the two groups, to highlight potential predictive factors of clozapine response.

Disclosure of Interest: None Declared

EPV1597

Drug-induced stuttering: Focus on medication with Antipsychotics

J. Marta^{1*}, Â. Ferreira¹, A. F. Reis¹, T. Cardoso¹, C. Batista¹, J. Miranda¹ and V. Vila Nova¹

¹Setúbal Hospital Center, Setúbal, Portugal

*Corresponding author.

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Introduction: Stuttering is a disruption in speech fluency, characterised by repetition of sounds, syllables, or words, consonant prolongations, and blockages. It can be classified as developmental or acquired, the latter being psychogenic or neurogenic. Neurogenic stuttering is often associated with brain injuries, stroke, neurodegenerative conditions, or side effects of certain medications. Drug-induced stuttering (DIS) is a recognised but rare side effect of psychotropic medications, particularly antipsychotics. Although uncommon, DIS significantly impacts quality of life, especially in males aged 20 to 40. Clinicians may mistakenly attribute the onset of stuttering to the progression of psychiatric or neurological conditions, overlooking the potential role of medication. The exact mechanism of DIS remains unclear, but it is likely related to disruptions in neurotransmitter systems.

Objectives: This review aims to explore the pathophysiology and neurochemical pathways involved in antipsychotic-induced stuttering (AIS) through a literature review.

Methods: A non-systematic literature review was conducted using PubMed with the keywords "psychopharmacology", "stuttering", and "fluency disorder".

Results: Clozapine emerges as the primary drug implicated in DIS, though cases involving olanzapine, risperidone and aripiprazole have also been reported. The pathogenesis of AIS likely involves neurotransmitter system disruptions, particularly dopamine, glutamate and serotonin, within circuits such as the cortico-basal ganglia-thalamocortical loop and white matter fiber tracts. Dopamine dysregulation appears to play a central role, as antipsychotics

that block dopamine receptors may impair motor control in speech-related pathways, and additionally in the prefrontal cortex and nigrostriatal pathway. This disruption alters the balance between different brain regions, leading to deficits in motor control over the muscles involved in verbal articulation, which subsequently manifest as stuttering. Furthermore, cognitive and sensory disorders may also contribute to DIS pathogenesis.

Interestingly, stuttering improvement has been noted in some individuals with the same medications that induce it in others, reflecting the variability of dopamine's role in different brain processes.

Conclusions: DIS, particularly from antipsychotic medications, is a rare but significant clinical issue that may be overlooked. It can cause substantial social impairment, especially in psychiatric patients, who are vulnerable to stigma. Careful monitoring of medication side effects, particularly in those with no prior stuttering history, is essential to provide the best possible care. Drug withdrawal or dose adjustment is often an effective intervention for managing DIS.

Disclosure of Interest: None Declared

EPV1599

Impact of Paliperidone Palmitate 6-Month Treatment After Hospital Discharge

M. J. Mateos-Sexmero¹, O. Martin Santiago^{1*}, B. Arribas-Simón¹, O. Segurado-Martín¹ and C. Alario-Ruiz¹

¹Psychiatry, Hospital Clínico, Valladolid, Spain

*Corresponding author.

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Introduction: Rehospitalization is common in psychosis, often due to poor adherence to antipsychotic treatments. Long-acting injectable antipsychotics (LAIs), particularly paliperidone palmitate 6-month (PP6M), have shown promise in improving adherence and reducing relapses compared to monthly or quarterly formulations. Rapid initiation of PP6M during hospitalization may further optimize post-discharge outcomes and enhance the therapeutic adherence, minimizing the risk of a new outbreak, reducing the impact of rehospitalization and improving patients' quality of life.

Objectives: To evaluate clinical outcomes and treatment adherence in schizophrenia and other psychotic disorders after rapid PP6M initiation during psychiatric hospitalization.

Methods: A retrospective analysis of 24 hospitalized patients diagnosed with schizophrenia and other psychotic disorders treated with PP6M within 7–10 days was conducted. Treatment adherence, follow-up attendance, and adverse effects were evaluated using McNemar's test for statistical analysis.

Results: Patients had a mean age of 36.8 years (SD=10.85), 64% were male, with an average of 2 prior hospitalizations (SD=3.16) in the past two years. Previously, 57% were on monthly LAIs. Post-discharge, 83% attended follow-ups. Antipsychotic monotherapy increased by 27% ($p = .10$) to 59%, while attendance at over 80% of appointments improved by 47% ($p \leq .001$). Akathisia was reported in 25% of patients.

Conclusions: PP6M significantly improves adherence by simplifying treatment regimens. Increased follow-up attendance (47%) and greater use of monotherapy reflect better patient outcomes. These findings align with prior evidence on the efficacy of LAIs in preventing relapses. Rapid initiation of PP6M can reduce

rehospitalizations and optimize hospital resources. The low incidence of akathisia (25%) supports its safety and tolerability for long-term use.

Disclosure of Interest: None Declared

EPV1603

The Effects of a Single Dose of Methylphenidate on Motor Performance in Young Healthy Participants Diagnosed with Attention-Deficit/Hyperactivity Disorder (ADHD)

A. Mimouni Bloch^{1,2*}, Y. Bloch^{2,3} and S. Tsuk⁴

¹Child Development Center, Loewenstein Hospital, Raanana; ²Faculty of Medicine, Tel Aviv University, Tel Aviv; ³Child and adolescent outpatient clinic, Shalvata Hospital, Hod Hasharon and ⁴Exercise physiology, The Levinsky-Wingate Academic College, Netanya, Israel
*Corresponding author.

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Introduction: Methylphenidate (MPH), a common stimulant medication for attention-deficit hyperactivity disorder (ADHD), has been shown to enhance both fine and gross motor skills in individuals with ADHD.

Objectives: This study aims to assess the acute effects of a single dose of MPH on agility and balance motor tests, as well as physiological parameters such as heart rate (HR) and blood pressure (BP) at rest and after motor tests, in young healthy participants diagnosed with ADHD.

Methods: A randomized crossover design was employed to evaluate agility and balance motor performance with and without MPH treatment. The study included 35 physical education students (mean age 25.3±3.6 years) diagnosed with ADHD, 65.7% of whom were male. Each participant used their prescribed MPH medication. Motor tests included a zigzag agility test, with and without leading a ball, and a balance test. Physiological measurements, including HR, BP, and core temperature, were recorded at rest and after the motor tests. Subjective sense of effort was evaluated using the RPE scale.

Results: The agility test without a ball showed a small but significant improvement following MPH treatment (without MPH 7.4±0.8, with MPH 7.4±0.8, $p=0.25$). No significant differences were found in the balance test or the agility drill with a ball, regardless of MPH treatment. Systolic blood pressure (SBP) at rest was significantly higher after MPH administration (without MPH 126.7±10.8, with MPH 131.9±12.7, $p=0.023$). There were no significant differences in diastolic blood pressure (DBP), HR, or core temperature at rest or after the motor tests.

Conclusions: A single dose of MPH improved performance in the agility test without a ball but did not enhance balance or agility with a ball. These findings suggest that while MPH may enhance certain motor functions, its effects are selective and not universally beneficial across all motor tasks.

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EPV1604

Enzyme-inducing effect of the original anticonvulsant on the liver monooxygenase system – prospects for clinical use in the treatment of paroxysmal disorders

E. I. Mochalova^{2*}, T. V. Shushpanova¹, E. V. Gutkevich^{1,2}, T. P. Novozheeva¹, O. V. Shushpanova³, I. N. Smirnova⁴ and N. E. Kolomiets^{5,6}

¹Mental Health Research Institute, Tomsk National Research Medical Center, Russian Academy of Sciences; ²National Research Tomsk State University, Tomsk; ³Mental Health Research Center, Moscow; ⁴Tomsk Research Institute of Balneology and Physiotherapy, branch of the Federal Scientific and Clinical Center for Medical Rehabilitation and Balneology of the Federal Medical and Biological Agency; ⁵Siberian State Medical University of the Ministry of Health of the Russia, Tomsk and ⁶Kemerovo State Medical University of the Ministry of Health of the Russia, Kemerovo, Russian Federation

*Corresponding author.

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Introduction: It is necessary to know how the pharmacokinetics of psychotropic drugs changes in the body of patients during their long-term use.

Objectives: To study the pharmacokinetic parameters of the anticonvulsant galodif in experimental rats at different times of drug administration.

Methods: Galodif (meta-chlorobenzhydryl urea, 100 mg/kg) was administered in rats (in suspension, intragastrically) for: 1, 5 and 15 days. Galodif was determined in the microsomal fraction of rat liver. Pharmacokinetic parameters were calculated by a model-independent method of statistical moments. The statistical significance of differences was assessed using the Kolmogorov-Smirnov λ -test at $p<0.05$.

Results: A single administration of galodif to rats is accompanied by a slowdown in its elimination from the body: the values of T1/2 (18.82±6.25h), MRT (22.41±7.07h), MET (10.64±2.84h), AUC (15.01±4.86 mcg/ml) increase, indicating the retention of galodif in the body tissues. A 5-fold administration of galodif stimulates the elimination of the drug: T1/2 (2.22±0.52*h), AUC (3.68±0.79*mcg/ml), MRT (2.95±0.73*h), MET (3.00±0.65*h) decrease. The pharmacokinetic parameters of the drug indicate a pronounced tissue availability of galodif molecules. With a 15-fold administration of galodif, the elimination of the drug from the body slows down somewhat, remaining accelerated relative to a single administration: T1/2 (10.79±2.90*h), MRT (3.97±1.03*h), MET (12.05±4.10*h), AUC (19.28±7.13*mcg/ml). The revealed changes in kinetic parameters during long-term administration of galodif to rats stimulate the elimination of the drug by inducing the microsomal liver oxidative system.

Conclusions: The choice of a drug that combines anticonvulsant and detoxifying properties is of great importance in long-term therapy of paroxysmal disorders, epilepsy and alcoholism.

Disclosure of Interest: None Declared