

schizophrenia in the exacerbation phase and in the remission phase.

**Methods:** A total of 124 patients were examined during the work. Of them, 82 patients with paranoid schizophrenia (F20.0) had a mean age of  $33.6 \pm 5.12$  years (52 males, 30 females), disease duration averaged  $8.9 \pm 4.62$  years. Patients with schizophrenia included 42 patients with acute schizophrenia and 40 patients with schizophrenia in therapeutic remission. The control group included 42 sex- and age-matched patients. IgG was purified by affinity chromatography on columns with proteinsepharose on an AKTA purifier chromatograph (GE). The homogeneity of isolated IgG preparations was checked by Lemilly electrophoresis in a gradient of 4-18% PAAG. Gel filtration under pH-shock conditions was performed on a Superdex-200 HR 10/30 column. NADPH-dependent peroxidase activity of IgG was determined on a SPECORD M-40 spectrophotometer (Carl Zeiss) at 340 nm by NADPH oxidation in the conjugated glutathione reductase reaction of tertiary butyl hydroperoxide reduction. Statistical processing of data was performed in Statistica 12.0 program.

**Results:** It was proved that IgG from patients with schizophrenia had NADPH-dependent peroxidase activity, and this activity is an intrinsic property of the investigated antibodies. The NADPH-dependent peroxidase activity in IgG patients in the exacerbation stage was increased 3-fold ( $p=0.0001$ ) compared to the studied activity in the group of healthy individuals, and it was increased 2-fold ( $p=0.017$ ) in the group of patients in therapeutic remission compared to the activity in healthy individuals. Also NADPH-dependent IgG peroxidase activity in patients in remission was 1.7 times lower than in patients during the exacerbation period ( $p=0.012$ ).

**Conclusions:** It was established for the first time that abzymes from patients with schizophrenia and healthy individuals have NADPH-dependent peroxidase activity and can decompose lipo and hydroperoxides. We hypothesize that these abzymes help cope with generalized oxidative stress. Under the influence of neuroleptic therapy in patients in remission, the level of oxidative stress and NADPH-dependent peroxidase activity of abzymes decrease.

**Disclosure of Interest:** None Declared

## EPP0452

### Cardiovascular Risk Assessment in Psychotic Disorders: A Comparative Analysis of Plasma Atherogenic Index between Remitted Patients and Healthy Control

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doi: 10.1192/j.eurpsy.2024.599

**Introduction:** Psychiatric patients have a higher risk of premature mortality primarily due to cardiovascular diseases (CVD). One significant contributing factor is the presence of dyslipidemias. Current studies are shifting focus towards lipoprotein ratios, believed to better reflect cardiovascular risk. These studies have demonstrated that ratios associated with high-density lipoprotein (HDL) are stronger predictors for CVD compared to traditional

lipid parameters. One of these ratios is the logarithmic transformation of the triglyceride (TG) to HDL ratio, known as the plasma atherogenic index (PAI).

**Objectives:** Our study aimed to compare the PAI between patients diagnosed with psychotic disorders who presented to our outpatient clinic and healthy control groups.

**Methods:** Fifty patients diagnosed with psychotic disorders, including 50 residing in a nursing home and 50 outpatient in such facilities, presented to our psychiatric outpatient clinic and were included in our study. Additionally, a healthy control group consisting of 49 individuals was recruited. A socio-demographic data form was administered to all groups. Peripheral blood levels of HDL, Triglycerides (TG), and LDL were recorded for each participant included in the study. Ethical approval for the study was obtained from the local ethics committee.

**Results:** The patient groups were compared in terms of age and gender. While there was no statistically significant difference in gender between the groups, a significant difference was observed in terms of age ( $p=0.099$ ,  $p=0.004$ ). When examining the age distribution of the groups, it was observed that the care facility group was older compared to the other groups. The age and gender distributions of the groups are shown in Table 1 and Table 2.

Psychotic patients in the outpatient group and the nursing home group were compared in terms of age and atherogenic index. Age was statistically significant, indicating that the nursing home group was significantly older ( $p=0.001$ ,  $p=0.478$ ). In the comparison of the control group with psychotic patients, there was no statistical difference in age, but a significant difference was found in terms of the atherogenic index ( $p=0.510$ ,  $p=0.001$ ). The statistical analysis and data between psychotic patients and the control group are presented in Table 3.

**Image:**

	Female	Male	Total	p
Out Patient Group	20(40.0%)	30(60.0%)	50(100.0%)	0.099*
Nursing Home Group	14(28.0%)	36(72.0%)	50(100.0%)	
Control Group	24(49.0%)	25(51.0%)	49(100.0%)	
Total	58(38.9%)	91(61.1%)	149(100.0%)	

The calculations were performed using the Pearson Chi-Square test

	Patient Age			p
	Minimum	Maksimum	Median	
Out Patient Group	19	64	38.48	0.004*
Nursing Home Group	23	64	46.06	
Control Group	23	64	41.08	

The calculations were performed using the Kruskal-Wallis test.

	Control Group	Psychosis Group	p
Age (Mean, $\pm$ SD)	41.08( $\pm$ 11.4)	0.49 ( $\pm$ 0.20)	0.510*
AI (Mean, $\pm$ SD)	42.27( $\pm$ 11.7)	0.63 ( $\pm$ 0.24)	0.001*
Number of Patients	49	100	

AI: Aterojenik Index  
The calculations were performed using the Mann-Whitney U test

**Conclusions:** This study, examining the comparison of Plasma Atherogenic Index (PAI) in patients diagnosed with psychosis with healthy controls, represents a significant step in understanding the cardiovascular health profile of this population and developing

appropriate treatment strategies. Future research will further contribute to a deeper understanding of the impact of psychiatric disorders on cardiovascular health and aid in the development of effective interventions to minimize these effects.

Disclosure of Interest: None Declared.

**Disclosure of Interest:** None Declared

## EPP0453

### Medication choice and psychosis Hospital readmissions: A two-year comparative study

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doi: 10.1192/j.eurpsy.2024.600

**Introduction:** Hospital readmissions in psychosis are a critical concern, with medication choice playing a vital role. Oral antipsychotics, though common, rely on patient adherence and can lead to relapses if not followed. Long-acting injectable atypical antipsychotics (LAIAs) provide an alternative, ensuring consistent medication release and reducing relapse risk due to missed doses. Studies indicate that LAIAs result in fewer readmissions due to improved adherence. Tailoring treatment to individual needs is essential. Medication choice significantly influences hospital readmission prevention in psychosis. LAIAs, which could offer greater adherence to treatment and symptom control, present a promising option. Individualized treatment decisions are a priority for long-term recovery.

**Objectives:** This study aimed to compare the hospital readmission rates within two years post-discharge among two groups of patients diagnosed with schizophrenia and other psychotic disorders who received either oral antipsychotic treatment or LAIAs.

**Methods:** We collected sociodemographic and hospitalization data from 155 patients, 90 receiving oral antipsychotics and 65 receiving LAIAs, following their discharge from a psychiatric unit.

**Results:** There were 90 patients in the oral treatment group, and 65 in the LAIA group, with 67.6% receiving paliperidone and 26.1% receiving aripiprazole. There were no significant differences in age or gender between the two groups. However, patients in the LAIA group had *longer stays in the hospital* ( $M=14.7$ ;  $SD=10.2$  vs  $M=11.1$ ;  $SD=6.4$ ;  $t_{(153)}=2.67$ ;  $p<.01$ ) and a higher number of prior admissions ( $M=3.2$ ;  $SD=3.7$  vs  $M=1.3$ ;  $SD=3.5$ ;  $t_{(153)}=2.41$ ;  $p<.01$ ) compared to the oral antipsychotic group. Additionally, a higher percentage of patients in the LAIA group were diagnosed with schizophrenia (60%) compared to the oral antipsychotic group (24%) ( $X^2_{(1, N = 155)}= 20.4$ ,  $p<.01$ ). After two years, readmission rates were 66.6% for the oral antipsychotic group and 61.5% for the LAIA group ( $X^2_{(1, N = 155)}= 8.5$ ,  $p > .05$ ). However, the time to readmission was shorter for patients on oral antipsychotics ( $M=172.4$ ;  $SD=162.0$ ) compared to those on LAIAs ( $M=326.2$ ;  $SD=211.4$ ;  $t_{(153)}=3.05$ ;  $p<.01$ ). Notably, 86.6% of patients on oral antipsychotics were readmitted within the first year, while only 52% of those on LAIAs experienced readmission during the same period ( $X^2_{(1, N = 155)}= 8.5$ ,  $p = .001$ ).

**Conclusions:** Long-acting injectable antipsychotics (LAIAs) appear to reduce hospital readmissions, with a more pronounced

effect in the first few months post-discharge. However, after two years, the readmission rates between LAIAs and oral antipsychotics become comparable. This data suggests that while LAIAs may reduce early readmissions, their long-term effectiveness is on par with oral antipsychotics.

**Disclosure of Interest:** None Declared

## EPP0454

### Attention flexibility is associated with retinal cup-to-disk ratio in patients with schizophrenia spectrum disorders

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doi: 10.1192/j.eurpsy.2024.601

**Introduction:** In recent years, there has been increasing interest in the potential use of retinal imaging as a non-invasive and easily accessible tool for investigating the neurobiological underpinnings of schizophrenia. Studies have suggested that patients with schizophrenia spectrum disorders (SSD) have structural abnormalities in the retina, including changes in retinal thickness and the ratio of the retinal cup-to-disk ratio.

**Objectives:** To investigate the relationship between retinal cup-to-disk ratio and cognitive performance in patients with SSD using a high-definition retinal imaging device – optical coherence tomography (OCT) scanner.

**Methods:** The sample was comprised of twenty patients with SSD (F20-F29 according to ICD-10 criteria). All diagnoses were confirmed by a researcher using the Mini International Psychiatric Interview. All patients underwent complete ophthalmological examination, excluding any ocular pathology. Retinal thickness was measured in both eyes of all patients with a high-definition spectral-domain OCT device. Examined retinal parameters were: total retinal nerve fiber layer thickness (RNFL); RNFL thickness in all eye quadrants (nasal, temporal, superior, inferior); RNFL symmetry; average macular volume (MV); average macular thickness (MT); ganglion cell layer thickness (GC); average retinal cup-to-disk (C/D) ratio, vertical C/D ratio. Cognitive performance of all patients was tested using the Intra/Extradimensional Set Shift Task (IED). IED is a component of a state-of-the-art computerized battery for cognitive assessment – Cambridge Neuropsychological Automated Test Battery. IED is a measure of maintenance, shifting and flexibility of attention. Associations between retinal variables and IED measures were determined with Pearson correlation analyses.

**Results:** Mean age of patients was  $33 \pm 7.5$  years. Fifty five percent of the sample was male, illness duration was  $6.2 \pm 3.9$  years. Daily dosage of chlorpromazine was  $225.7 \pm 108.8$  mg. Retinal C/D ratio in the right eye was positively associated with IED total errors ( $r=0.50$ ;  $p=0.02$ ) and negatively with IED stage progression ( $r=-0.52$ ,  $p=0.18$ ). Likewise, vertical C/D ratio was positively associated with IED total errors ( $r=0.49$ ;  $p=0.02$ ) and negatively with IED stage progression ( $r=-0.52$ ,  $p=0.18$ ).

**Conclusions:** Previous analyses of retinal parameters in patients with schizophrenia point towards enlargement of retinal cup-to-