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#### **EPV1365**

# Does smoking affect the prevalence of caffeine use in schizophrenia?

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**Introduction:** Caffeine acts as a competing antagonist of adenosine receptors, increasing the release of norepinephrine and the activation of noradrenergic neurons. Long-standing schizophrenia patients frequently develop a comorbidly high daily caffeine intake. This could be explained by its relationship with smoking [1,2].

**Objectives:** To determine caffeine consumption in schizophrenia and predisposing factors.

Methods: Cross-sectional study designed on a sample of 68 outpatients with a follow-up of at least 5 years at the Mental Health Unit, aged between 18 and 65 years, diagnosed with schizophrenia (ICD-10). Average daily caffeine intake was quantified by reference values for each beverage: coffee (66.7mg/100ml), tea (30mg/100ml), soft or energy drinks (11.5mg/100ml). High intake was defined as a consumption of ≥200mg of caffeine per day. Retrospective review of medical records revealed tobacco use and negative symptoms observed on the PANSS scale. Statistical analysis were performed using SPSS v21.0 (significance p<0.05).

**Results:** 88.2% of the subjects were daily caffeine consumers with a mean intake of 146.7mg/day (SD=5.8), and a mean consumption time of 6.2 years. Coffee was the predominant beverage in 66.7% of the cases, followed by soft or energy drinks (25%) and tea (0.1%). 45% of participants also had a high caffeine intake of  $\geq$ 200 mg/day. Comorbid smoking was found in 93% of these patients. Negative symptomatology prevailed among caffeine consumers (PANSS-N= 41.3).

**Conclusions:** Xanthine abuse seems to be highly prevalent in people with schizophrenia, and there may be a relationship with smoking and negative psychotic symptoms.

Disclosure: No significant relationships.

Keywords: caffeine; tobacco; schizophrénia; Xanthine

## **EPV1364**

# Development of approaches to stratification of patients with schizophrenia based on cytokine levels using cluster analysis

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**Introduction:** Alterations in a variety of immune parameters, including abnormal cytokine levels, are known to be found in schizophrenia. These changes can be useful in identifying patients with the most severe immune abnormalities.

**Objectives:** To develop approaches to stratification of schizophrenia patients based on cytokine levels using cluster analysis.

**Methods:** We recruited 53 patients (25 women/28 men) with a verified diagnosis of simple or paranoid schizophrenia and 37 healthy individuals (19 women/18 men) in our study. Serum levels of IL-1 $\beta$ , IL-2, IL-4, IL-6, TNF $\alpha$ , INF $\alpha$ , BAFF, GM-CSF, NGF $\beta$ , NRG1, and GDNF were determined using a MAGPIX multiplex analyzer (Luminex, USA). Statistical analysis was performed in Statistica 10.

**Results:** Principal component analysis and partial least-squares discriminant analysis showed that the combined multi-cytokine profiles of the studied groups differ. The results of the k-means cluster analysis are presented in Table 1 The most reliable results are obtained by a combination of 4 variable: IL-1 $\beta$ , IL-4, BAFF and GDNF. Table 1 Percent of individuals classified in different clusters depending of number of parameters using for classification.

	Healthy individuals		Schizophrenia patients	
Number of variables for classification	Cluster 1	Cluster 2	Cluster 1	Cluster 2
10 variables	5,4	96,4	26,4	73,6
4 variables	0	100	11,1	88,9
3 variables	2,7	97,3	29,6	70,4
2 variables	8,1	91,9	20,4	79,6

**Conclusions:** A subgroup (cluster 1) of schizophrenic patients with severe immune abnormalities was identified using data on the levels of IL-1 $\beta$ , IL-4, BAFF and GDNF. Anti-inflammatory therapy is recommended for this subgroup of patients. *Support by Grant of RSF*  $N_2$  21-75-00102.

**Disclosure:** No significant relationships. **Keywords:** schizophrenia; cytokines

## **EPV1365**

# Prodromal phase and first episode psychosis in schizophrenia: early signs and diagnosis

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**Introduction:** The detection of the initial prodrome of schizophrenia (SK) before the first episode psychosis remains a major concern in current psychiatric research.

**Objectives:** In this paper we aimed to analyse clinical and psychopathological aspects of prodromes leading to first-lifetime psychotic episodes and to highlight the high-risk features in order to establish preventive strategies and to provide early intervention in SK.

**Methods:** This is a retrospective observational descriptive study conducted in the 'Prof. Dr. Alexandru Obregia' Clinical Hospital of Psychiatry in Bucharest, Romania. We collected data from the medical records of 139 patients previously diagnosed with SK