

Job mutation was recommended for four patients. Early retirement due to invalidity was proposed for two patients.

**Conclusions:** The decision on the medical fitness of workers with psychiatric disorders remains a delicate issue that requires the attention of both legislators and occupational health practitioners.

**Disclosure of Interest:** None Declared

## EPV0106

### Proteomic analysis of blood serum in bipolar disorder

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**Introduction:** Bipolar disorder (BD) often has symptoms similar to other mental disorders (BD), and there are no paraclinical criteria for differential diagnosis. (Geoffroy *et al.* Bip Dis 2017; 5 7). Published work on MD proteomics is scarce and focused on schizophrenia. (Dmitrieva *et al.* PeerJ. 2022; 10 e13907). Therefore, it is important to study potential biomarkers of BD using easily accessible material—blood serum (Rhee *et al.* *Transl Psy* 2023; 13 44). Identification of proteins involved in the pathogenesis of BD will help in the study of the pathogenetic mechanisms of BD, the development of differential diagnostic methods and pathogenetically based drugs.

**Objectives:** Carrying out a comparative proteomic analysis of blood serum from patients with BD and healthy individuals to identify potential biomarkers

**Methods:** We analyzed the protein spectrum of the blood serum of 14 patients with BD who were admitted during a depressive episode at the age of 32 [21;52] years with a disease duration of 8[5;11] years. The control group consisted of 10 mentally and somatically healthy individuals corresponding to the gender and age of the BD group. Blood serum was purified from 14 major proteins using affinity chromatography and separated by electrophoresis using the Laemmli method. After trypsinolysis, proteins were identified using HPLC/mass spectrometry on an Orbitrap instrument. Mass spectrometric analysis was performed on the Advanced Mass Spectrometry Core Facility of Skolkovo Institute of Science and Technology. Protein identification was carried out using the UniProtKB database using the Mascot search engine. The results were tested for significance using the nonparametric Fisher exact test with Yates correction.

**Results:** In patients with BD, qualitative mass spectrometry revealed differential expression of 21 neurospecific proteins. Among them: Protein dispatched homolog 3, Ceroid-lipofuscinosis neuronal protein 6, SWI/SNF complex subunit SMARCC1, Neurogenic differentiation factor 4, Protein furry homolog-like, REST corepressor 1 – are involved in the proliferation, development and differentiation of neurons; Hemicentin-2, Dystrophin, Voltage-dependent L-type calcium channel subunit alpha-1D, Syntaxin-

binding protein 5, Small conductance calcium-activated potassium channel protein 1– participate in synaptic transmission of ion transport and form receptors.

**Conclusions:** Studying the role of these proteins in BD and their quantitative content in a larger number of patients is promising. This will help in the development of new diagnostic criteria and targets for drug therapy for BD.

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## EPV0107

### Clinical Characteristics and Aggression in Unipolar and Bipolar Course of Affective Disorders

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**Introduction:** The diagnosis and treatment of depression are complex due to its diverse forms. Recent focus in clinical practice has been on identifying markers for mono- and bipolar depression, as early diagnosis significantly impacts treatment.

**Objectives:** To identify clinical characteristics of unipolar and bipolar depressive disorders and assess their correlation with aggression levels in patients.

**Methods:** We studied patients at the Mental Health Research Institute of Tomsk NRMC: ICD-10 codes: Bipolar Affective Disorder (BD) (n=28), Recurrent Depressive Disorder (RDD) (n=33). Patients with BD were older (49 (33; 52) years) than those RDD (40 (31; 51) years) (p=0.018). The current depressive episode duration was shorter for BD (3 (2; 7) months) compared to RDD (5 (2; 12) months) (p=0.018). Gender distribution was comparable (p=0.568). We measured clinical symptoms (depression, anxiety, anhedonia) using psychometric tools (HAM-D, HAM-A, SHAPS) at admission and after 3 weeks of therapy. Aggression was assessed with the Buss-Durkee Hostility Inventory (BDHI) at admission.

**Results:** Patients with RDD demonstrated a higher severity of depressive symptoms upon admission (Table 1).

**Table 1.** Clinical Characteristics of Unipolar and Bipolar Depression Course

Severity of Symptoms	Bipolar Depression	Unipolar Depression	p (U-test)
HAM-D on admission	19 (15.5; 24)	22 (18; 26)	<b>0.044</b>
HAM-D after 3 weeks	4 (2; 6)	4 (3; 7.75)	0.219
HAM-A on admission	16 (12; 25)	19.5 (13; 26.75)	0.098
HAM-A after 3 weeks	3 (2; 6.5)	4 (3; 7.75)	0.219
SHAPS on admission	5 (1.25; 9)	3 (0; 10)	0.7
SHAPS after 3 weeks	1 (0; 4)	1 (0; 3)	0.44

The severity of some aggressive patterns was higher in patients with bipolar disorder (Table 2).