

search, attempt to get constant leading of trainer. External position, low level of self-analysis, stereotype of emotional reactions, alexithymia and infantilism are predominated. During the trainings about 1/3 of group make the attempts to overcome characteristics described above. Durable research of psychological features of students in the process of further education shows that these skills are fastened.

Conclusion: Inclusion of psychotherapeutic course of personal growth in the educational process helps 30–45 % of students to overcome unproductive school stereotypes, helps to harmonize personality and personal characteristics, which give possibility for professional growth. Group psychotherapeutic work is an element of educational process of students.

P16.04

Psychoprophylaxis and health promotion in organic psychic disturbances

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It results from literature, that in over 50% of youth treated due to different psychic disturbances there occur indicators of organic brain injury. This concerns both, the socalled microinjuries mainly perinatal, which clinically assume one of three types of infantile cerebral palsy. Phenomenon of the increase of the percentage of persons with discreet psychic changes being late consequences of organic brain damage during intrauterine life, labor and early childhood, concerns to a significant degree the army, too. Children and youth are from the military point of view pre-draftees and draftees. Yet, as it is known from clinical experience, young people with brain microinjuries are like their healthy peers enlisted into the army. Medical boards, with the present standard of diagnostics, are not able to eliminate these persons from enlisting into the army. Thus, there exists and increases the problem of psychic disturbances (persons clinically manifesting deadaptative syndromes conditioned by brain microinjury with their certification-diagnostic, prophylactic and therapeutic implications. That is why, for many years, it has been postulated that labor period and early childhood should be evaluated within general medical examinations even on the basis of child's health record-book. Individual selection to particular posts, determination of tasks dependently on personality traits and psychic resistance, obeying regulations and order of the day, contacts with the soldiers' families etc., should be an important element of psychoprophylactic activity. Compelx psychoprophylactic and health promotion activity aim at eliminating the acute deadaptative syndromes.

P17. EEG

P17.01

Effects of vagus nerve stimulation on sleep in depressed patients

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Objective: Recent studies have demonstrated the efficacy of vagus nerve stimulation (VNS) in patients with treatment-resistant depression. The present study examined the effects of VNS on sleep in patients with treatment-resistance. Sleep EEG studies were conducted at baseline, prior to surgery and after 10 weeks of VNS.

Method: Seven women (44.7 ± 9.7 years) participated in this study. Six were diagnosed with major depressive disorder with nonpsychotic features and one with Bipolar I disorder, currently

depressed. All had at least 3 unsuccessful antidepressant treatment trials in current MDE.

Results: Baseline sleep architecture was more disturbed in treatment-resistant patients. Sleep microarchitecture was particularly abnormal with severely dampened sleep EEG rhythms. After VNS, both sleep macro- and microarchitecture were significantly improved. Stage 1 sleep and awake time were decreased whereas deeper Stage 2 was increased post-VNS. The amplitude of sleep EEG rhythms was significantly increased, to near normal levels. Subjective sleep was also improved after VNS.

Conclusion: These effects are likely to be clinically significant since persistent sleep disturbance is associated with increased risk of relapse and recurrence of depression.

P17.02

Gender differences in spectral EEG analysis during exacerbation of schizophrenia

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Objective: The aim of the study was to compare spectral EEG profile of schizophrenic patients during exacerbation with that of control subjects matched as for sex and age.

Methods: Forty-seven schizophrenic patients: 24 males, 23 females, aged 18–48 years and fifty healthy control subjects: 27 males, 23 females, aged 18–47 years were enrolled into the study. 16-channel resting EEG was performed and minimum 30 seconds epoch with no evident artifacts was chosen for subsequent FFT analysis. Data were log-transformed to obtain gaussianity and then Z-transformed.

Results: Male schizophrenic patients during exacerbation as compared to male control subjects had overall profound alpha 2 power decrease as well as beta 2 power increase. Female schizophrenic patients during exacerbation as compared to female control subjects had overall profound alpha 2 power decrease as well as theta power increase.

Conclusions: Decreased alpha 2 power in schizophrenic patients during exacerbation may indicate thalamo-cortical pathways dysfunction. Increase of beta 2 power in male schizophrenic patients during exacerbation may indicate cortical dysfunction and increase of theta power in female schizophrenic patients may indicate limbic system dysfunction.