

**Method:** Indices of functional disturbances of 4 brain areas (dyencephalic structures, frontal lobes, left and right hemispheres) have been determined in terms of psychological functions responses and quantitative analysis of qualitative characteristics of higher psychological functions processing has been done.

**The Results:** Method of neuropsychological assessment of therapy efficacy in cognitive dysfunction treatment has been developed; therapy resistant and therapy sensitive components of a higher psychological function have been identified for each type of medication. It has been also revealed that the components of higher psychological functions associated with frontal lobes may respond oppositely on the same medication (for example, the rate of rigidity declines while the rate of impulsiveness increases).

**Conclusions:** Therapy directed at the correction of an impaired component of a psychological function significantly improves cognitive possibilities of patients with even moderate psychoorganic syndrome. The neuropsychological method is a cheap and reliable tool for recognition of an impaired component.

### P03.414

#### PSYCHOPHARMACOTHERAPY OF DEPRESSION IN PRIMARY CARE

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The purpose of the investigation was to study the efficacy of various antidepressants in depression treatment in primary care.

**Methods:** Psychopathological Scale, HAMD, HARS, SCL-90-R.

**Results:** 102 patients with depression have been treated with modern antidepressants in primary care. The most frequent comorbid somatic disorders were as follows: neurocirculatory asthenia, hypertension, intestinal disorders, and asthma. Antidepressants were prescribed if the pronouncement of the depressive features exceeded 15 points in accordance with the HAMD.

The following medications that lasted not less than 4 weeks have been studied: Tianeptine (n = 29), Fluoxetine (n = 29), Sertraline (n = 18), Citalopram (n = 15), Miancerin (n = 11). The results show that in all the cases significant reduction of the pronouncement of both psychopathological and somatic features of depression have been observed. Statistical data suggest that the indices of the scales HAMD, HARS, SCL-90-R were decreasing ( $p < 0.05$ ). The results show the difference between Coaxil and Fluoxetine and Sertraline influences, which was below the statistical significance, nevertheless. It has been shown that Coaxil is effective in reduction of a somatic component of depression, and Sertraline is more appropriate mean when psychic components of depression are the main features in clinical picture. Side effects have been observed in few cases at the extent that didn't require the cancellation of the treatment course.

**Conclusions:** The studied antidepressants prescribed in low therapeutic doses are highly effective and safe remedies for depression treatment in primary care.

### P03.415

#### ANTIOXIDANT EFFECT OF CEREBROLYSIN THERAPY OF PSYCHOORGANIC SYNDROME

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The method of luminol-dependent chemiluminescent (CL) analysis in the system of whole blood, using small amount of peripheral

blood (0.8–1.0 ml), which determined the level of oxygen active forms (OAF) during phagocytosis of particles of opsonized latex have been used in examination before and after treatment with cerebrolysin (C) of 41 former Chernobyl "liquidators" who have afterwards developed a complex of psychosomatic and mental disorders of exogenous-organic type. Two groups have been distinguished: (1) with marked effect of therapy and (2) with slight therapeutical effect. 10 healthy donors served as controls. In both groups two types of OAF production (hyperproduction and hypoproduction) have been evaluated. In the first group treatment with C has decreased index of CL ( $1.78 \pm 0.13$  compared with  $2.27 \pm 0.20$ ,  $p < 0.05$ ). In this group treatment with C normalised OAF production in cases of hyperproduction index of CL has decreased ( $1.14 \pm 0.07$  compared with  $4.59 \pm 1.02$ ,  $p < 0.001$ ) and in cases of hypoproduction it has increased ( $1.66 \pm 0.08$ ,  $p < 0.001$ ). In second group differences in levels of OAF production before and after treatment have not been significant.

Thus our data confirm antioxidant effect of C and allows to recommend the method of CL-analysis for the control of effectiveness of therapy and for the evaluation of "oxidative stress".

### P03.416

#### THE EXPERIENCE OF PRACTICAL USE OF THE I-STRUCTURAL G. AMMON TEST WITH PSYCHIATRIC HOSPITAL PATIENTS

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One of the approaches to the multilateral description of a personality, deserving attention of psychiatrists and psycho-therapists, is the I-structural ISTA test (G. Ammon). The method represents the structure of the unconscious through the description of central I-functions (aggression, anxiety, outer and inner I-delimitation, narcissism and sexuality), having constructive, non-constructive and deficiency components.

The practical use of the re-adapted and re-standardised in Russia version of the ISTA questionnaire with psychiatric patients confirmed its diagnostic utility and efficiency. The test helps to specify the diagnosis, to reveal the symptoms not found during the conversation, to differentiate the treatment. With no dependence on the applied concrete techniques the ISTA test assists to creating the rational tactics and strategy of psychiatrist work aimed at solution of non-constructive moments and at shifting them to constructive direction. Besides, the test allows to evaluate the efficiency of treatment and therapeutic dynamics.

Thus, the conducted primary analysis of the I-structure ISTA test established its applicability both for practical psycho-diagnostics and for clinical practice.

### P03.417

#### THE USE OF I-STRUCTURE ISTA G. AMMON TEST IN PSYCHO-DIAGNOSTIC RESEARCH WITH PATIENTS OF PSYCHIATRIC HOSPITAL

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The previous experience of use I-structure ISTA test (G. Ammon), describing a personality in terms of central I-functions: aggression, anxiety, outer and inner I-delimitation, narcissism and sexuality (having constructive, non-constructive and deficiency components) with mental patients confirmed its utility for practical psychiatry.

Comparative research with the help of ISTA test of 296 patients of three comparable (according to age and sex) diagnostic

groups - neurosis, organic psychiatric and schizophrenia - displayed trustworthy (disperse analysis, single-factor ANOVA) inter-group difference. Those ill with schizophrenia showed the highest indices of deficiant and/or destructive components of aggression, anxiety, I-delimitation; these indices were authentically higher than those of patients with organic psychiatry declinations; and blocs of anxiety and I-delimitations were higher than those of patients ill with neurosis. Simultaneously they had the lowest indices of constructive scales of aggression and sexuality; authentically lower indices than those having organic declinations.

Thus, ISTA test allows to range the studied clinical groups according to the degree of marking of deficiant destructive and, simultaneously, of constructive components of the most ISTA indices in the following sequence: those ill with schizophrenia, neurosis and patients with organic declinations.

### **P03.418** SOMATIC AND NEUROLOGICAL COMPLICATIONS IN DRUG ADDICTS

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Drug addictions cause heavy somatic and neurological complications up to the lethal outcome.

Out of 688 drug addicts treated at the in-patient clinic of the Research Institute of Addictions in 1999: 84% were dependent on heroin, and 16% - on other drugs (pervitin, ephedron, cocaine and polydrug).

The severity of opium withdrawal syndrome correlated with the presence of neurological microsymptoms. However, we observed a number of neurological symptoms just after an acute withdrawal period is over. It points to the presence of steady neurological changes within chronic drug abuse. Most frequently such microsymptoms took place in neurological status of patients with prolonged drug use and high dosages of drugs; and also in those who was marked with alcohol abuse in the past. They include an asymmetry of pupils (5%), inertness of pupil photo reactions (30%), horizontal and vertical nystagmus (15%), weakness of eye convergence (20%), proboscis reflex (5%), asymmetry of achill tendon reflexes (10%), light intentional tremor, more often asymmetrical (20%). Numerous drug injections into feet veins often correlated with lowering of achill tendon reflexes and hypesthesia in "sock" form which indicates at polyneuropathic changes.

Somatic disorders took an important place in patients' status (97% of cases in opium and polydrug groups). Limp skin was seen in 44% of cases. Almost all opium addicts (94.2%) had dental caries and paradantosis. In half of cases the thinness of muscles (45.7%), bronchitis (60%), disorders of heart rhythm (59%) were noticed. Hepatitis A, B, C and hepatocholycystites took a considerable place in somatic pathology - 92% and 77.1% respectively). Venereal diseases were very often diagnosed in our patients (68.5% in opium and 65% in polydrug group), which is the evidence of promiscuity among drug addicts. 14.3% HIV infected persons among the examined patients were revealed. 47% of addicts in the past suffered dangerous drug poisoning which was caused by drug overdosage. It was found out that 25% in-patients being treated in 1999 died from different causes (including drug overdosage).

### **P03.419** SYMBIOSIS OF PSYCHIATRY AND NEUROCOMPUTING. RESULTS, PROBLEMS, PERSPECTIVES

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Some possibilities of the using of neurocomputing methodology for a solving of actual problems of a psychiatry, a classification of psychical disorders and formalizing of diagnostics procedures are discussed. The main goals of a neurocomputing and psychiatry rapprochement, a possible problems and perspectives are defined. Some concrete practical results of neurocomputer utilization for a modeling of separate psychical disorders, reproduction of neurophysiological conformity to natural laws, psychological and psychical phenomena are presented. A likeness in neurocomputers and human brain activities is conditioned by their internal structural-functional similarity. As examples some concrete structures in human brain are brought. The problems of definition of "mediator topography" of central nervous system, brain and spinal cord for purpose of clinical and theoretical psychiatry are discussed. The problems of psychiatric diagnosis formalization and necessity of metrology as methodological stage in psychiatry are discussed. It is possible that a neurocomputing methodology will allow formalizing a procedure of psychiatric diagnosis and treatment. A neurocomputing methodology allows to formulate a necessary conditions for diagnostic and therapeutic neurocomputers also. From neurocomputing point of view a possible interpretation of such psychical disorders as illusions, hallucinations, delirium, anxiety, annoying states and etc. was given. The most difficult for formalization procedures categories of psychic activity (emotions, will, attention, motivation, drive, wishes, etc.) are discussed. A version of psychiatric disorders classification based on character of violation of neuronal net function is presented.

### **P03.420** VIDEOCOURSES ON PSYCHIATRY

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Videocourses on psychiatry for students and doctors who study psychiatry are presented. 1) The first course is on general psychopathology, basic symptoms and syndromes, specific psychopathology (12 hours). A classification is given according ICD-10. 2) The second course is 50 histories of diseases, where a analysis of some interesting and difficult cases are presented (30 hours). Videocourses are made on videotapes and partly on CD in Russian and very useful for unification of mental disorders diagnostics.

### **P03.421** ANTIDEPRESSANTS IN HEROINE ADDICTION TREATMENT

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The subject of the study were 126 drug addicts. In the most of them (92.8 per cent of cases) affective disorders were revealed which grew up along with the supression of withdrawal symptoms. In 68.8 per cent of cases they were presented with agitated depressions. Subdepressive states with dysphoric and panic disorders of different severity were prevalent. Affective disorders often entered the structure of craving for drug being its clinical reflection. The comparative analysis of the effectiveness of different groups of antidepressants in heroine addiction treatment on different stages of