

severe (12% of the cases). The rCBF was assessed by means of SPECT using ^{99}Tc -HMPAO as a tracer in six brain regions: dorsolateral prefrontal, orbito-frontal, anterior temporal, temporo-parietal, occipital, and basal ganglia.

Results: 1) The mild schizophrenic defect were better detected by the BVRT than by the SPECT ($p < 0.01$). 2) The rCBF was normal in four cases (16%), and the remaining 21 (84%) showed hypoperfusion in the frontal (dorsolateral prefrontal and orbito-frontal) and/or basal ganglia regions. 3) No significant relationship was found between the relatively lower rCBF and the degree of the defect. 4) The presence of BOTH (EITHER) treatment non-compliance AND (OR) substance (alcohol) abuse was related to the degree of the defect ($p < 0.05$). 5) The schizophrenic defect was significantly associated ($p < 0.05$) with a history of schizophrenia among the first-degree relatives (parents or siblings).

Conclusion: The results of this study are in favour of a multifactorial etiopathogenic hypothesis of schizophrenia.

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AN EEG STUDY OF THE NEURODEVELOPMENTAL HYPOTHESIS OF SCHIZOPHRENIA. MEASURES OF EEG ACTIVITY AND EEG REACTIVITY

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The hypothesis that irregular regressive phenomena in the organizational level of the neuronal network (representational network) underlie the manifestation of productive schizophrenic symptoms is tested with EEG data in three groups of normal adolescents, in first-episode, neuroleptics-naive schizophrenics and in matched controls (total: 70 subjects).

EEG (19 channel) theta, alpha and beta band centroid frequency was used as indicators of the level of complexity and momentary excitability of the neuronal network.

Schizophrenics show lower theta and higher alpha and beta centroids in EEG activity and partial similarities in theta and alpha centroid behavior with the two younger groups of juveniles.

The results are interpreted within the framework of a model of the brain's functions underlying allocation of attention as suggesting dissociated (partially regressed and partially over-activated) neuronal activation, i.e., dissociated contents of working memory in schizophrenia.

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ESTIMATION OF DIMENSIONAL COMPLEXITY OF MULTI-CHANNEL EEG IN FIRST EPISODE SCHIZOPHRENICS. AN EXTENSION AND REPLICATION OF A FINDING

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In nine first episode, neuroleptic-naive acute schizophrenics and in 18 matched in age, sex and basic education controls, the dimensional complexity of 19 EEG recordings (computed in 12 local gradients) was assessed by computing the correlation dimension during 10 seconds in five recording conditions: resting and after the presentation of four short sentences.

The correlation dimension of schizophrenics was significant higher in 26 of the 12 locations (resting 8 times; sentence 1, 5 times; sentence 2, 5 times; sentence 3, 4 times and sentence 4, 4 times). The results confirm our previous findings with 12 first episode schizophrenics where only two recordings were available.

The results are interpreted within the framework of a model of the brain's functions underlying allocation of attention as suggestive dissociated neuronal activation in schizophrenia.

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SCHOOL FOR PSYCHOPHYSICAL SELF-REGULATION OF DIABETES MELLITUS PATIENTS

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The diabetes mellitus often proceeds against a background of available or secondary psychic disorders. Our eight-year experience indicates that such patients need treatment in the "School for psychophysical self-regulation". The treatment was applied to the insulin-dependent and non-dependent patients in conjunction with manic-depressive psychosis, latent schizophrenia and marginal forms of neuro-psychic disorders. Patients were examined by clinical-psychopathological and psychological methods. The training provides maximum information on the nature of disease, methods of self-control, prophylaxis of complications, peculiarities of individual treatment - everything for continuous stable cure procedure. The patient's chronic stress, the shattering of the shaped stereotype, disturbances in the relationship and his fear for his future have to be taken into account. Thus, the main purpose of the psychiatric, psychotherapeutic and psychological help to the given contingent is in the first place a relief of mental state and a reduction of symptoms.

The psychological aspect of our program includes such purposes as to devise optimal styles for overcoming the nosogenic stress, to develop an adequate subjective conception of the disease, to correct one's self-appraisal, to form some self-regulation habits. The communicative connections within the group established, the patients became able to join actively in the psychosocial relations after the treatment. The combination of the training program with the psycho-corrective measures allows to improve a quality of the therapy, to prevent a development of neuro-psychical disorders, and it ensures psychosocial adaptation in the society.

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ELECTROCONVULSIVE THERAPY IN SCHIZOAFFECTIVE DISORDER

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Introduction: As it is known, ECT relieves such symptoms as delusions, hallucinations and agitation, but not the underlying schizophrenic apathy, social withdrawal and emotional unresponsiveness. It is most useful when severe symptoms have developed suddenly in a patient who was previously in good mental health, especially if there are also striking changes in mood (schizoaffective disorders).

Material and Method: The sample was consisted 73 inpatients with diagnosis of schizoaffective disorders. Two groups were established: twenty four with ECT treatment and forty nine with neuroleptic drugs.

Results: There were statistical differences between them in relation of gender and age. The therapeutic efficacy of ECT was assessed by using Hamilton Rating Scale for Depression and Clinical Global Impression Scale showed marked improvement in 70% of patients in both groups. But group with ECT (average 8.5/patient) showed less days of hospitalisation: 20.8 versus 37.5 days.

Conclusion: ECT can be useful in the therapy of schizoaffective disorder.

- (1) Miroslava Jasovic-Gasic. *Is ECT Efficient in Therapy Schizoaffective Disorders*. ECNP Congress, 1996.
- (2) Shapira B. et al. *Enhanced Serotonergic Responsivity Following Electroconvulsive Therapy in Patients with Major Depression*. British Journal of Psychiatry, 1992; 160: 223.

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SOME PERSONAL EXPERIENCE OF PSYCHOTHERAPEUTIC AID ON THE EXAMPLE OF A PSYCHO-NEUROLOGICAL OUT-PATIENT CLINIC OF A MOSCOW DISTRICT

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From 1995 to 1996 more over 200 patients addressed to the out-patient clinic of the one of the regions of Moscow to get psychotherapeutic aid. All of them were examined beforehand by psychiatrist. After preliminary diagnostic test 108 patients (35 men and 73 women) were selected. The variety of age of the patients was from 19 to 63 years old, 22% of which were officially invalidated in connection with their mental disease. The data distribution table N 2 shows and compares the results of the work with the patients according to the psychiatric diagnoses (ICD-10) and psychotherapeutic methods applied. The methods of psychotherapeutic treatment accounted to:

1. Weekly individual conversations with psychoanalytic orientation per 50 minutes each. It included from 7 to 12 talks (22 persons).
2. Weekly hypnosis group sessions including some elements of assertiveness training (41 persons).
3. Psychocorrectional groups for communication in which patients searched some affinity (45 persons). In the group for affinity more than half of the persons had severe disorders, mainly schizophrenia.

The Findings: In the process of individual psychodynamic psychotherapy the patients' attitude was becoming smoother to the environment for they realized their inadjustability in behaviour as well as their character peculiarities. After attending the group of hypnosis neurotic symptoms of the patients disappeared to some extent and were not so vivid. For example, either they again managed to use Underground without any fear, or they manager (twice as less) to reduce their doses of tranquilizers and antidepressants taken. In the process of attending a serie of the group of affinity a patients' low self-appraisal and inferiority complex disappeared, but their search for affinity and emotional syntonia increased. We obtained the increase of the level of adjustability with 11 out 24 schizophrenic patients. I suppose that it should be urgent to arrange psychocorrectional groups as well as apply reinforcing psychopharmacologic therapy during the periods of remission of the patients that suffer schizophrenia provided there is a regional out-patient clinic.

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VITAMIN E: AN ALTERNATIVE TO ANTICHOLINERGIC DRUGS?

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The degeneration of nigral neurons due to the oxidative formation of free radicals (Fr. R.) and the depletion of Fr. R scavenger enzymes, is the underlying process of neuroleptic induced pseudo-parkinsonism (Ps.P), as of parkinson (P.D). The phenotiazines form

Fr.R. intermediates, during their metabolism. Vitamin E. (V.E), protects cell membrane from damage, by Fr. R. since it attenuates the oxidation of unsaturated fatty acids (U.F. Ac). Our survey compared of V.E - effective in treating P.D - versus placebo, on neuroleptic treated schizophrenic patients' extrapyramidal side effects (E.S.Ef), in order to use it as a valid alternative to the anticholinergic drugs, of limited efficiency and of unpleasant and even harmful side effects.

Method: Thirty chronically hospitalized schizophrenic patients (16 male, 14 female), on the average 53 years old, after a two-week washout of neuroleptic and anticholinergic, were given haloperidol and V.E (2000 lu/Day) or matching placebo capsules, double-blind. After psychiatric and medical testing, patients were repeatedly (3 days after washout and then every 2 weeks, thrice) compared on two dyskinesia and E.S.Ef scales (SAS and AIMS). The study was monitored from outside and took about 7 month. 21 patients (11 on V.E, 10 on placebo) finished the trial. Dropout was due to persistent side effects.

Results: Using anova procedures no difference could be observed between both groups. The only exception was a strong trend on the AIMS between the two groups ($F = 3.86$, $DF = 13.15$, $P = 0.16$).

Conclusion: V.E seems not to be effective in treating neuroleptic induced Ps.P in chronically hospitalized schizophrenic patients. The study although based on firm theoretical grounds did not support the hypothesis. The reasons may be, the small sample used, the possibility of the dopaminergic system of such long lasting patients, being damaged and an inappropriate dosage as no dosage changes were made in V.E during the trial.

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THE DRUG PRESCRIPTION IN SCHIZOPHRENIA PATHOLOGY IN FRANCE

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From an épidémiological study realized in France during two resumptions in April 1995 and in April 1998 it is possible to have an analysis of modes practice concerning neuroleptic prescription in the schizophrenia on more of 1.000 files to each stop.

The analysis will focus on two aspects:

1. - characteristics of the neuroleptic processing and the other psychotropics processings associates.
2. - the evolution of these characteristics in 3 years considering the evolution of the references.

The population of schizophrenic patients seems to be distribute by an heterogeneous manner: there are 3 types of patients which can be differentiate by the drug treatment.

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MEMBRANE PHOSPHOLIPID ABNORMALITIES AS A BIO-CHEMICAL BASIS FOR THE NEURODEVELOPMENTAL CONCEPT OF SCHIZOPHRENIA

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The neurodevelopmental hypothesis is supported by changes in brain morphology, by behavioural abnormalities prior to the development of overt schizophrenia, by the increased risk of schizophrenia associated with viral infections during pregnancy and with perinatal complications, and by an association with minor physical abnormalities. The hypothesis fails to account for the genetic basis