

addicts — in Bulgaria (Sofia) and in London. Three scales created by D.Simpson were used to obtain personal assessment of: Drug Use Problems, Desire for Help, and Treatment Readiness. Data was collected from a total of 60 patients newly attending to outpatient methadone maintenance treatment agencies (30 in Bulgaria and 30 in London). Considerable differences in patient's motivations for seeking methadone maintenance treatment, and their expectations from it were found between the two groups. Such differences could be interpreted as resulting from the lack of previous experience and reliable knowledge about methadone treatment among drug users in Bulgaria, where the first methadone maintenance programme started in the end of 1995, while this approach is well known to the drug users population in UK.

### AN INTEGRATIVE RELAPSE PREVENTION PROGRAM FOR ALCOHOLICS

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Alongside of new results on pharmacological relapse prevention in alcoholism a number of relapse prevention programs are described in the literature, but only few are empirically tested. For physical fitness programs, a power motivation training, behavioural and cognitive interventions there are some hints for being effective [1,2]. This contribution reports an integrative inpatient relapse prevention program with behavioural, cognitive and meditative components. Two groups of inpatient treated alcoholics (N = 21; standard treatment plus relapse prevention program; standard treatment only) had been compared in an experimental pre-post design. The relapse prevention program group showed an increase of self-efficacy and a decrease of hopelessness. No differences had been found in treatment motivation and effectiveness of coping behaviour. Six month after discharge from inpatient treatment the relapse rate of the experimental group was lower compared to the standard treatment group. It is concluded that relapse prevention programs need several components for effective and protection of abstinence.

- [1] Körkel, J. & Lauer, G. (1995). Rückfälle Alkoholabhängiger: Ein Überblick über neuere Forschungsergebnisse und -trends. In J. Körkel, G. Lauer & R. Scheller (Hrsg.), *Sucht und Rückfall. Brennpunkte deutscher Rückfallforschung* (S. 158–185). Stuttgart: Enke.
- [2] Lauer, G. (1992). Interventionsstudien zur Rückfallprophylaxe: Ergebnisse und Probleme. In J. Körkel (Hrsg.), *Der Rückfall des Suchtkranken. Flucht in die Sucht?* (S. 217–137, 1. Nachdruck). Berlin: Springer.

### ART-PSYCHOTHERAPY IN DRUG-ADDICTION

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Many drug-addicted patients exhibit hypersensitivity to visual impressions and *regressive Ego-functions*, sometimes associated with a capacity for profound *symbolic experiences* and their *abstract pictorial expression*.

Ideas, images and emotions are blended in a process which is experienced as a *new autognosis*, a *transformation of the Self*, through philosophical enlightenment, culminating in 'mystic union'.

A symbolic plane of experience enlarges the '*individual-personal*' into '*personal-individual*' by leading to more and more eminent connections and universal formations. In this way the liberated spirit is qualified to realize '*auto-therapeutic effect*'.

During Art-psychotherapy we distinguished the following stages:

- *Personality dissociation*: with realistic and grotesque graphic presentations of morbid and symbolic experiences.
- *Self-identification*: with abstract and symbolic graphic presentations of realistic experiences and conflicts.
- *Ego-reintegration*: with realistic graphic presentations of realis-

tic experiences, wishes and feelings, after the patient's amelioration.

Thus, *Art-psychotherapy* is considered as the combination and the correlation between *Art-therapy* (nonverbal psychotherapy) and *Psychoanalysis* (verbal psychotherapy).

### METHADONE VERSUS INTRAVENOUS OPIATE ADDICTION: THE EVALUATION OF A SUBSTITUTION PROGRAMME

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The main reasons for establishing an oral methadone substitution programme are always based on the intention of improving physical and social conditions of drug addicts. Disregarding the problems due to HIV-infection, the somatic status of intravenous opiate addicts is primarily influenced by the drug itself and the high frequency of infectious diseases. Besides this, numerous additional behavior patterns influence the physical health of i.v. drug addicts: frequent intoxications, needle sharing, irregular food intake, promiscuitive behavior, lack of hygiene etc.

Social impairment of i.v. drug addicts is mostly reflected by a bad status of education, frequent unemployment, a poor situation of housing, frequent financial problems and a high frequency of imprisonment etc.

Evaluation of an oral methadone substitution programme was done by the comparison of patients included in this programme versus i.v. opiate addicts. 49 patients have been included into this study, 20 of which were intravenous heroine users and 29 received oral methadone substitution for at least 7 month. Physical status was determined by the following parameters: immuno-globulines, Beta 2-microglobuline, neopterin, soluble IL-2-receptor, T-lymphocytes including subsets, hepatitis serology, liver transaminases. Social status was evaluated by parameters such as level of education unemployment and frequency of delinquency etc. The inclusion criteria for all patients were a negative HIV test in the last two weeks before the immunological investigation and good physical health on the day they had blood drawn.

Surprisingly the three groups did not show any statistical differences when comparing the above mentioned somatic parameters. Referring to the social parameters, social integration was significantly worse in the heroine addicted group compared to the methadone substituted group. Most remarkable differences could be shown in the status of employment and frequency of delinquency ( $p < 0.01$ ).

### ALCOHOL USE AND ABUSE AMONG REFUGEES

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The aim of this study was to investigate the consumption of alcoholic beverages among refugees and to determine the causes of such behavior and of the disturbances connected with it.

To achieve this aim, we have examined the group of 46 male refugees, and compared their results to the control group. The results have shown that refugees have more frequently consumed the alcoholic beverages compared to the control group, what was determined at the level of statistical significance ( $p < 0.01$ ), and that among them the alcohol dependency was diagnosed more often.

The most frequent reason for drinking among refugees were anxiety (41.4%) and fear (28.3%) as a consequence of previously more frequent exposure to the stressful situations compared to the control group ( $p < 0.01$ ).

The results stress the problem of drinking the alcoholic beverages

among refugees and suggest the need for carrying out the systematic preventive and treatment programs.

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## NR9. Neurobiological aspects of dementia

*Chairmen:* S Lovestone, M Kopelman

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### A PROSPECTIVE STUDY OF DEMENTIA WITH LEWY BODIES — CLINICAL DATA

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**Background:** Dementia with Lewy bodies accounts for 10% of dementia cases. Their importance was emphasised by the retrospective identification of a marked neuroleptic sensitivity syndrome. Little is known about the course of dementia.

**Method:** Consecutive patients with a clinical diagnosis of Lewy body dementia and patients with a clinical diagnosis of Alzheimer's disease, identified by consultant old age psychiatrists, are referred to a research clinic. A standardised assessment, the LBAD, is completed. This includes the MMSE, UPDRS and detailed sections pertaining to fluctuation, clouded consciousness, falls and non-cognitive symptoms. Diagnoses are made according to the McKeith criteria for SDLT, the Byrne criteria for DLB and the NINCDS ADRDA criteria for probable or possible Alzheimer's disease.

**Results:** Data are reported on the first 73 patients. 42 had SDLT, 30 had AD and 1 did not meet either set of criteria. There was good agreement between the criteria for SDLT and those for DLB (Kappa +0.62). A case note review found 95% of SDLT patients to have been referred. The baseline level of cognitive impairment was similar in the SDLT and AD patients (MMSE 14.92 vs 13.88). 48 patients have been followed up for 1 year and 15 for 2 years. The SDLT patients were significantly more likely to have visual hallucinations at baseline (OR 35.75, 95% CI 8.67, 148.41) and during the first year of follow up (OR 26.06, 95% CI 5.47, 123.97). Delusions, falls and depression did not differ significantly at baseline or during follow up. Auditory hallucinations occurred more frequently in SDLT patients at baseline (OR 12, 95% CI 8.58, 122.73) but not during follow up. Patients with SDLT experienced a mean MMSE deterioration of 3.91 over 1 year and 7.40 over 2 years, compared to deteriorations of 4.14 and 6.00 in patients with AD. Neither was a significant difference. SDLT patients without Parkinsonian symptoms were not more likely to develop these over follow up than patients with AD. Over the course of the study, 6 of the 19 SDLT patients exposed to neuroleptics, but 0 of the 7 AD patients experienced marked neuroleptic sensitivity.

**Conclusion:** The main differences between the 2 groups were the persistence of visual hallucinations and the occurrence of neuroleptic sensitivity in the SDLT patients.

### A POSSIBLE MARKER FOR ALZHEIMER'S DISEASE: IN VIVO DETECTION WITH ANTICHOLINERGIC EYE DROPS

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The role of cholinergic transmission in the progression of Senile

Dementia of the Alzheimer Type (SDAT) is well established. The evidence is mainly based on post-mortem neurochemical studies which show a reduction of choline acetyl transferase and acetyl choline esterase in the cerebral cortex and hippocampus of patients with SDAT. The reduction in enzyme levels has been found to be significantly related to an increase in the mean neuritic plaque count and to the degree of intellectual impairment.

The aim of this study was to see if it is possible to differentiate people suffering from dementia of the Alzheimer's type from those with other forms of dementia, by measuring their mydriatic response to eye drops of the anticholinergic agent 'Tropicamide'.

43 patients were investigated and divided into two groups: Group I (n = 31) with a clinical diagnosis of possible or probable SDAT and Group II (n = 12) with non-Alzheimer's dementia. There was no difference between the two groups with regards to their age, duration of illness or severity of dementia. The pupillary responses revealed no difference between the two groups at 0, 20 and 40 minutes after application of the drops, but there was a significant (p = 0.015) difference in dilatation at 60 minutes, indicating a marked mydriatic response in Group I. The discovery of such a marker may have implications for the identification of Alzheimer's disease during the 'preclinical phase'.

### A LONGITUDINAL STUDY ON QUANTITATIVE MORPHOMETRIC CT PARAMETERS IN PATIENTS WITH PROBABLE ALZHEIMER'S DISEASE

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We tried to improve the reliability of computed imaging parameters from computed tomography (CT) scans on the efficacy of the diagnosis of Alzheimer's disease (AD).

We determined 15 morphometric variables from CT scans from 40 patients with probable AD according to NINCDS-ADRDA and 40 non-demented controls matched for gender and age. The morphometric variables were submitted to a principal component analysis (PCA) and the resulting factor loadings were interpreted.

In normal aging the proportion of cerebro-spinal fluid (CSF) was significantly correlated with age, while one principal component accounted for a major part of the observed variance of ventricular and periventricular volumes.

In AD most of the morphometric variables were significantly correlated with the degree of cognitive impairment and not with age. Two principal components accounted for brain atrophy in AD, and the enlargement of CSF spaces in AD was correlated with the severity of dementia.

The statistical discrimination of patients with AD vs. normal controls improved from mild (79%) to moderate (86%) and severe dementia (93% correct classifications).

In the second cross-section 30 AD patients and 55 matched controls could be reexamined after two years. No remarkable changes were observed in the control group, but the patients scores worsened significantly in the Blessed Dementia Rating Scale and the Mini Mental State Examination, ventricular and total intracranial CSF volume, and EEG band power.

The volumetric changes in the CT scans contributed to clinical diagnostic reliability with a sensitivity as well as specificity approximately 0.94.