of our discipline on the world level. Many well-known scientists and clinicians emigrated and were successful in their professional career in the western world. After the velvet revolution in 1989 a rapid privatization mainly of the outpatient-departments (about 90% of the outpatient psychiatrists are non-state) with its pros and cons was one of the main features. There was not a period of dehospitalisation, but a trend to reduce the number of beds (10 186 in psychiatric hospitals and 1367 in general hospitals) and to improve the quality of psychiatric wards is obvious. According to economic possibilities various intermediate facilities have been founded. Plans to adopt the system of postgraduate training in psychiatry according to EU or American experiences were not up to now very successful. The Czech Psychiatric Association prepared the concept of the development of Czech psychiatry for the next 5–10 years.

S31.02
THE PROS AND CONS OF A CZECH EDUCATION: EXPERIENCE OF A NORWEGIAN PSYCHIATRIST

A. Restan

No abstract was available at the time of printing.

S31.03
THE HISTORY OF CZECH PSYCHOPHARMACOLOGY AND PSYCHOPHARMACOTHERAPY OF AFFECTIVE AND SCHIZOPHRENIC DISORDERS

J. Švestka. *University Psychiatric Department, Brno, Czech Republic*

Modern Czechoslovak psychopharmacology has a relatively long and rich tradition. Its beginnings in the 50s and 60s are linked to the names of creative chemists and pharmacologists - Protiva, Jílek, Rajšner, the Metyš couple and others from the Research Institute of Pharmacology in Prague. These researchers have synthesised original antidepressants such as propazepine, proheptadiene (later called amitriptyline), proheptatriene (subsequently called cyclobenzaprine), and especially dosulepine with its derivatives northiadene and hydrothiadene. A number of antidepressants of the 2nd generation were tested in Czech Republic, such as melitracene and danitracene, maprotiline and levoprotiline, mianserine, viloxazine, nomifensine and pirlindole (Náhunek, Vencovský, Vina, Zapletálek). Clinical studies concerning SSRIs were conducted to accelerate the onset of the citalopram effect by infusions and in combination with pindolole (Švestka, Vina) or to compare fluoxetine with tianeptine (Faltus, Novotný). Many Czech psychiatrists have taken part in verifying the prophylactic effect of lithium (Grof, Hanuš, Sou ek, Švestka, Vina, Dostál, Zvolský and others). As to the group of neuroleptics, dichlorpromazine, fenoharman and chlorprothixene were prepared and then clinically tested in Prague. An entirely novel perathiepine group of multireceptor antipsychotics was discovered, consisting of clorothepine, oxyprothepine and isofloxythepine, which are all effective in the treatment of schizophrenic and manic disorders. Czech psychiatrists have participated in the whole history of search for atypical antipsychotics. As soon as in the beginning of the 70s, clozapine was compared with perphenazine and chlorpromazine (Rodová, Vencovský, Vina), risperidone with haloperidol (Švestka 1990) and an international survey comparing olanzapine and haloperidol was carried out in Czech Republic, too (Libiger, Švestka et al.). Since the discovery of new psychotropics in the 50s till the present. Czech psychopharmacology has taken an active part in developing and clinical testing of numerous modern psychopharmacological agents.

S31.04
SEARCH FOR GENES FOR BIPOLAR DISORDER: THE CZECH-CANADIAN CONNECTION

M. Alda[1,3]*, P. Zvolský[2], P. Grof[3]. [1]*Dalhousie University, Halifax;* [3]*University of Ottawa, Canada*
[2]*Charles University, Prague, Czech Republic*

Bipolar disorder (BD) is recognized to have a genetic basis. Yet, after decades of research, no susceptibility genes have been identified. Genetic mapping studies in BD have been complicated by the complexity of its genetic mechanisms and, above all, by clinical and genetic heterogeneity. Investigations of homogeneous clinical samples are therefore considered an important step towards identification of susceptibility genes. Several studies have pointed out that the response to lithium (Li) prophylaxis can serve such purpose and identify a homogeneous subtype of BD. These studies demonstrated that responders to Li have typically family histories positive for BD (Mendlewicz et al. 1973, Zvolský et al. 1974, Smeraldi et al. 1984, Grof et al. 1994). Li is the treatment of choice in typical forms of bipolar disorder and its effect is specific in comparison with other mood stabilizers. It is assumed to exert its prophylactic effect in bipolar disorder by interacting with several cellular signalling mechanisms, namely adenylyl cyclase and phosphoinositide pathways. In our presentation we will review data from a series of studies carried out for the last twenty years in collaboration between several research centres in Canada and the International Group for Study of Lithium (IGSLI). These studies confirmed that the responders to Li have an illness characterized by stronger genetic loading and that the familial transmission was compatible with a single-gene effect. We have also characterized the phenotypic spectrum of Li responsive BD that includes BD, schizoaffective disorder and recurrent unipolar depression. In association and linkage studies we found support for a role of PLCγ1 gene, but not other candidate genes. Most recently, we conducted a full genome scan on a sample of 247 individuals from 31 families. The probands had 9.3 ± 6.7 illness episodes before the treatment and have been fully stabilized on lithium monotherapy for 13.9 ± 8.0 years. For the phenotype of affective disorders, the highest lod score obtained was in the 15q14 region (lod = 3.50, $p < 0.00002$). We have also identified additional positive regions on chromosomes 6, 7 and 21 with lod scores in the 1.8-to-2.7 range. When the phenotype was defined as lithium response, the highest lod score was 1.53 on 7q11.2 ($p < 0.002$). These results further support the usefulness of homogenous samples for identification of susceptibility genes in bipolar disorder.

S32. New antipsychotics in schizophrenia – have they fulfilled the promise?

Chairs: A.G. Awad (CDN), W. Gaebel (D)

S32.01
NEW ANTIPSYCHOTICS: SYMPTOMS AND CLINICAL COURSE

W. Gaebel. *Department of Psychiatry, Heinrich-Heine-University Dusseldorf, Germany*

With the introduction of the newer atypical neuroleptics treatment in schizophrenia has entered a new stage. Although similar in their

https://doi.org/10.1016/S0924-9338(00)94207-X Published online by Cambridge University Press

effect on positive symptoms compared to traditional neuroleptics, extrapyramidal side-effects are no longer a major side-effect of these compounds. Clozapine, Risperidone, Zotepine, Olanzapine, Amisulpride, and others soon to come to the market like Quetiapine and Ziprasidone share the characteristic of low – if any – motor side effects. They therefore do not contribute adversely to secondary negative symptoms. On the contrary, negative symptoms seem to improve with atypical neuroleptics independent of their lower potential to induce EPS. Some studies have even concluded a favorable influence on primary negative symptoms. However, these studies have only rarely considered the necessary methodological requirements to render this conclusion valid.

Although there are other side effects more prevalent (e.g. weight increase), less EPS and improvement of negative symptoms are thought to contribute to better compliance. Less deteriorating effects on cognitive functioning and positive effects on quality of life may additionally explain better drug acceptance. This in turn has been related to the lower relapse rate under maintenance treatment. Despite higher drug costs an overall positive costbenefit ratio has been calculated from this finding. However, research findings are still inconclusive in this respect.

Results of studies in the field will be critically discussed, open questions and future research strategies with special emphasis on a recently implemented German Research Network.

S32.02
QUALITY OF LIFE AND NEW ANTIPSYCHOTIC MEDICATIONS IN SCHIZOPHRENIA

A.G. Awad

No abstract was available at the time of printing.

S32.03
NEW ANTIPSYCHOTICS: THE ISSUE OF SIDE-EFFECTS

W.W. Fleischhacker

No abstract was available at the time of printing.

S32.04
PHARMACOTHERAPY AND THE INTERACTION WITH PSYCHOSOCIAL TREATMENT

W. Rössler

No abstract was available at the time of printing.

S32.05
ECONOMICS OF NEW ANTIPSYCHOTICS

M. Knapp

No abstract was available at the time of printing.

S33. Suicide Part I. Biological markers of suicidal behavior

Chairs: J. Angst (CH), Y. Lecrubier (F)

S33.01
GENETICS OF SUICIDAL BEHAVIOUR

W. Maier. *Department of Psychiatry, University of Bonn, Germany*

Suicide ideation and behaviour is a multifactorial trait and state. Only a few risk factors and etiological components are known: gender, age, psychiatric disorders, personality factors, previous suicide attempts and critical life events. Besides these factors a strong determinator is familiality.

It is well documented that suicidal behaviour and ideation is running in families with a substantial genetic component. However, the mechanism of familial-genetic transmission remains obscure. Several sources of the familial aggression might occur. Some evidence proposes that familial aggregation of suicide attempts has a strong genetic component which is independent of diagnosis and related to the genetically influenced liability to aggressive behaviour. Self-mutilating behaviour is associated with suicidal behaviour and ideation as well as with aggression, both intraindividually and within families in a subgroup of probands. Suicide ideation, but less so suicide attempts, seems to be more under the control of the genetically influenced affective disorders and to be unrelated to the genetics of aggression.

Overall, the relationship between familial-genetic determinants of axis I/II disorders and suicidal behaviour/ideation remains unclear. The familial-genetic relationships to underlying genetically influenced personality traits and associated biological traits (characteristics of brain-serotonergic metabolism) are only partly elucidated. Family studies and genetic association studies exploring these relationships are presented.

S33.02
BIOLOGICAL MARKERS FOR SUICIDAL BEHAVIOURS IN ALCOHOLICS

P. Gorwood

No abstract was available at the time of printing.

S33.03
THE BIOLOGY OF SUICIDE: THE DIMENSIONAL VERSUS THE DIAGNOSTIC CORRELATES

J.J. Mann. *Columbia University and NYS Psychiatric Institute, New York, NY, USA*

The factors that contribute to suicidal behavior may be understood in terms of a stress diathesis model. In that model, acute psychiatric illnesses or psychosocial crises act as precipitants and the diathesis is represented by enduring aspects of personality, temperament and social/family environment. Biological correlates have been observed for disorders such as major depression, psychoses and alcoholism or substance abuse. Other biological correlates have been observed for traits such as aggression/impulsivity. Reductions in serotonergic function have been observed to be associated with completed suicide and with serious suicide attempts, independently of diagnosis. Postmortem studies have demonstrated that there may be a concentration of serotonergic abnormalities in the ventral prefrontal cortex, an area involved in behavioral inhibition. That

https://doi.org/10.1016/S0924-9338(00)94207-X Published online by Cambridge University Press