

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

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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 2<sup>nd</sup> generation were tested in Czech Republic, such as melletracene 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 multi-receptor 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

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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  $9.3 \pm 6.7$  illness episodes before the treatment and have been fully stabilized on lithium monotherapy for  $13.9 \pm 8.0$  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

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