

**P47.06**

APD-induced plasticity and ERK1/2 translocation to the nucleus

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**Objectives:** Dopamine D<sub>2</sub> receptors are typical G<sub>i/o</sub>-coupled receptors that represent key targets for antipsychotic drugs (APD). The therapeutic effects of APDs are delayed, suggesting long-term adaptations mediated by changes in gene expression possibly involving activation of the mitogen-activated protein kinase ERK1/2 cascade.

**Methods:** Using Western blot analysis, we investigated the regulation of ERK1/2 in both total and nuclear fractions from HEK293 or COS-7 cells transiently expressing D<sub>2L</sub> or D<sub>2s</sub>, following stimulation by quinpirole.

**Summary of the results obtained:** Western blot analysis with antibodies to the basal and phosphorylated forms of ERK1/2 in whole cell extracts from D<sub>2L</sub>-COS7 cells, showed that QUIN stimulates a marked increase in the levels of p42 and p44 kDa phosphorylation whereas the total ERK1/2 is unaffected. QUIN-induced phosphorylation of ERK1/2 is prevented by prior treatment with APDS. The same overall pattern is observed with D<sub>2L</sub>-HEK293 cells, or using D<sub>2s</sub>. Pharmacological analysis of ERK1/2 phosphorylation following D<sub>2L</sub> activation revealed that the signal transduction pathways involved seem to lead to activation of Ras and the Raf1/MEK/ERK cascade. After addition of QUIN to D<sub>2L</sub>-COS7 cells, downstream transcription factor Elk-1 is phosphorylated following a similar time course to that of ERK1/2 phosphorylation. Regulation of the nuclear import of activated ERK1/2 by D<sub>2</sub> receptors was studied in digitonin permeabilised cells through Western blot analysis after subcellular fractionation. Upon activation by QUIN, a strong nuclear staining appeared. WGA pre-treatment inhibited QUIN-induced phospho-ERK1/2 staining at the level of the nucleus but not in the total extract. Similar results were obtained following incubation with a dominant negative importing. Furthermore, a marked increase in p-Elk-1 immunolabelling was observed in the nuclear fraction immediately following QUIN, and this effect was not completely abolished by WGA.

**Conclusions:** Overall, these results provide evidence that ERK1/2 activation and nuclear translocation dopamine D<sub>2</sub> receptors, suggesting these events play a role in APD-induced gene expression via Elk-1.

**P48. Quality assurance****P48.01**

Patient satisfaction as a marker of psychiatric treatment quality – the TÜBB2000

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In the industrialized countries, increasing account is being taken of the “consumer standpoint”, also in the context of psychiatric hospitalisation, as a significant element of quality management.

For the German-speaking region, an instrument applicable to both clinical routine and scientific investigations has been developed in recent years: the “Tübingen Treatment Satisfaction Form – TÜBB2000”.

Based on treatment areas of relevance to satisfaction from the patient's standpoint, this questionnaire was developed in a number of phases. 25 items were extracted by means of item analysis, and a significantly higher variance was achieved in the answers by using a

change-oriented question style. The validity of the instrument was verified inter alia by comparison with established instruments such as the CSQ 8. The accuracy of the registration detailing, however, proved to be greater with the TÜBB2000. Factor analysis was used to identify three factors reflecting key aspects of satisfaction: atmosphere (8 items), quality of treatment (8 items), and autonomy (7 items).

Within the framework of a cohort study of schizophrenics (N=169), regression analyses indicated that treatment satisfaction was of prognostic significance with respect to compliance in the post-hospitalisation course of treatment as well as to the re-hospitalisation of schizophrenic patients. Using the “TÜBB2000”, quality defects in routine clinical practice could be identified and appropriate measures planned for improvement and quality development.

**P48.02**

Evaluation of psychiatric day treatment

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In order to establish a continuous quality management in the psychiatric day clinic of the Hannover Medical School we developed a documentation system which combines the professionals' and the patients' perspectives. Besides ICD-10 and the GAF-Scale the therapists rated three items concerning awareness of illness, insight into illness and compliance. For self-report assessment the patients filled in the SCL-90-R and a weekly ward rating scale, which highlights among other things aspects of structure, atmosphere and interaction with the therapists. Prior to discharge the therapists and the patients rated changes of symptoms and general well-being and their satisfaction with the therapeutic outcome. Based on 84 treatment episodes over a one-year-period we present and discuss preliminary results focussing on four diagnostic groups (schizophrenia, depressive, personality and adjustment disorders).

**P48.03**

Data base of quality in psychiatric outpatient treatment. DIPSY

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**Objective:** During the last decade, the number of patients offered treatment in the CMH-centres or other outpatient clinics has rapidly increased. A large variation in target group, organisation and treatment modalities has been found. No closer knowledge of the quality of this treatment is available. A nation-wide database to document the quality of the treatment started in the spring 2001.

**Methods:** An interdisciplinary working group (DIPSY) selected quality indicators from clinical experience and evidence-based literature. Data is derived from the Psychiatric Case Register (DPC-Dipsy) and from supplementary clinical variables (WEB-Dipsy) obtained at yearly follow-up or at the end of an outpatient treatment period. Each treatment unit will be able to compare its results with average statistics from own county the entire country, and with the recommended standards of quality.

**Results:** The indicators and standards are as follows:

1. Symptoms/function: Gaf (80% og seve psychotic yield a Gaf>40).
2. Treatment: Bipolar affective psychosis, Maintenance therapy (90%). Schizophrenia, novel neuroleptic (50%). Psychotherapy (40% of patients with borderline personality disorders).
3. Social: Homelessness (5%).