

Conclusion: Autism is not only a complex disorder, but also a genetically heterogeneous disorder. In a number of subjects clinical genetic assessment may reveal specific causes of autism. In research, a combination of different techniques is necessary to detect the different genetic mechanisms in autism. Delineation of phenotypical subgroups, or of endophenotypes could facilitate molecular genetic research. The complexity of the disorder makes genetic counselling very difficult.

S-49-04

How to create brief and meaningful psychotherapy from assessing psychiatric symptoms, minor physical abnormalities and soft neurological signs

S. Bejerot. *Clinical Neuroscience Psychiatry, Stockholm, Sweden*

Objective: ADHD and autism spectrum disorders (ASD) could be viewed as innate personality disorders. However, ADHD and ASD are not always identified in childhood. Many adults are diagnosed with personality disorders, anxiety, depressions or delusions while their underlying neuropsychiatric disorder goes unrecognized.

Methods: Since 2001 approximately 200 adults without previous diagnosed ADHD and ASD were assessed. All patients are referred from psychiatrists or psychologists and assessed at a specialized neuropsychiatric unit for adults with suspected ADHD or ASD. The assessments include a structured interview with a parent and approximately 6 hours of structured interview with the patient, somatic examination, laboratory analysis and neuropsychological testing. Ideally only patients who can accept ADHD or ASD diagnosis are assessed. The results are explained to the patient in detail in order to make him/her understand his/her malfunction and shortcomings from a biological point of view. The discussion and conclusion are taped and given to the patient. All patients fill in an anonymous evaluation after the assessments are completed.

Results: A vast majority of the patients report that they experienced the examination as meaningful, led to greater self-knowledge and performed in a respectful way.

Conclusion: In order to facilitate self-understanding, self-acceptance, and empowerment and alleviate unjustified blame put on the parents, thorough assessments are advocated. By encouraging the patient to actively participate in the assessments and view his/her symptoms, emotions, thoughts, reactions and behaviours from a perspective of an underlying biological disorder, a meaningful brief psychotherapy can be accomplished.

S-49-05

Comorbidity and spectrum disorders: Diagnostic confusion?

W. Verhoeven. *Vincent van Gogh Institute for Psychiatry, Venray, Netherlands*

Objective: The trend in current psychiatric diagnostic fashions is not towards a comprehensive presentation of data from the neurodevelopmental trajectory, all potentially relevant symptoms and traits and etiological considerations in order to reach a true medical diagnosis, but rather in the direction of the enumeration of some selected behaviours and symptoms that 'meet the criteria for' a certain categorical diagnosis.

Results: This diagnostic approach leads to an enormous so called comorbidity on the one hand and a broadening into so called spectrum disorders at the other. Even in the case of well defined

genetic syndromes with their phenotypical presentation, several of these cookbook diagnoses are added, like schizophrenia spectrum disorder in velo-cardio-facial syndrome and bipolar spectrum disorder in Prader-Willi syndrome. The same holds for the comorbidity with ADHD and pervasive developmental disorders in patients with mental retardation. PDD-NOS is regularly 'diagnosed' in a great variety of disorders with a known genetic etiology like tuberous sclerosis, fragile-X, velo-cadio-facial syndrome, Williams syndrome and many others.

Conclusion: Over the past years this had led to a huge diagnostic confusion, exaggerated prevalence figures and an unproductive search for genetic markers of the classical psychiatric diseases. It is therefore advocated to use a dimensional assessment of communication skills as part of the phenotype that is investigated. The same holds for disorders of attention and activity.

S-49-06

Subclinical attention deficit/hyperactivity disorder and adjustment disorders

A. Bobrov. *Institute of Psychiatry, Moscow, Russia*

Objective: Subclinical attention-deficit/hyperactivity disorder (sADHD) is thought to contribute to the development of stress-related disorders in adulthood. The aim of the work was to study mental adaptation resources of young adults with sADHD.

Methods: A group of randomly chosen university students (n=100, aged 20 to 22 years) was evaluated clinically and with the Adult ADHD Self-Report Scale Symptom Checklist and 16 Personality Factors test.

Results: Twenty two 22 (22.0%) of students were found to have sADHD. They showed lowered attention, restlessness and inability to resist monotony. Their personality traits differentiated them significantly from the rest of the group by levels of maturity (6.6 ± 1.6 vs. 7.9 ± 1.6), depression (4.8 ± 2.0 vs. 3.0 ± 1.8) and mental strain (5.1 ± 1.7 vs. 2.8 ± 1.7). Persons with sADHD were less self-controlling (5.1 ± 1.9 vs. 2.8 ± 1.7) and conscientious (4.3 ± 2.1 vs. 6.3 ± 1.7). 12/22 (54.6%) of them had clinical symptoms of adjustment disorders, their prevalence thus being significantly ($p < 0.05$) higher, than in the rest of the group 15/78 (19.2%). Cognitive style of persons with sADHD had some specific features, such as field dependence, lack of prognostic abilities, impulsivity, egocentricity, "tunnel" or "black-and-white" thinking.

Conclusion: These findings may indicate a possible association between adjustment disorders, abnormal cognitive style and sADHD features in young adults.

Tuesday, April 5, 2005

S-48. Symposium: Social brain and psychopathology

Chairperson(s): Martin Brüne (Bochum, Germany), Shigenobu Kanba (Fukuoka, Japan)
08.30 - 10.00, Holiday Inn - Room 3

S-48-01

Evolutionary perspectives on schizophrenia

J. Polimeni. *University of Manitoba Dept. of Psychiatry, Winnipeg, Canada*

Objective: Schizophrenia is likely an ancient condition with a substantial genetic basis. Consequently, evolutionary forces may have played an integral part in its development. **Methods:** We reviewed the literature on this subject published since the 1960's. **Results:** Evolutionary based hypotheses concerning schizophrenia typically fall into two general categories: 1) ideas that speculate on the possible evolutionary advantages of the condition and 2) formulations that frame schizophrenia in its classical orientation, as a disease or accident of normal brain evolution. **Conclusions:** In addition to reviewing previous hypotheses, we present our own idea that shamanism and group selection may elucidate the origins of schizophrenia.

S-48-02

Theory of mind and linguistic skills in patients with schizophrenia
M. Brüne. *Centre for Psychiatry and Psychotherapy, Bochum, Germany*

Objective: "Relevance Theory" proposes that the pragmatic use of human language requires an intact theory of mind (ToM). ToM is defined as the ability to attribute desires, beliefs and intentions to one-self and others. **Methods:** Patients diagnosed with schizophrenia were assessed using a German Proverb Test (Barth and Küfferle, 2001), a 'theory of mind' test battery, executive functioning tests and verbal intelligence. Psychopathology was measured using the PANSS (Kay et al., 1987). Patients' performance was compared to a group of healthy control persons. **Results:** 'Theory of mind' performance predicted, conservatively estimated, about 39 percent of the variance of correct proverb interpretation in the patient group. **Conclusions:** The ability of schizophrenic patients to interpret proverbial metaphorical speech crucially depends on their ability to infer mental states. Future studies may address differences between diagnostic subtypes of schizophrenia.

S-48-03

Non-verbal communication processes predict onset and course of depression - ethological analyses of depressed patients' and interviewers' interpersonal behaviour

E. Geerts, A. L. Bouhuys, T. W. van Os. *University of Groning Dept. of Psychiatry, Groningen, Netherlands*

Objective: Attachment theorists have proposed that the style of parental bonding (PB) may have substantial impact on personality development. **Methods:** We studied whether PB can predict the outcome of treatment in 106 depressed outpatients. **Results:** Poor outcome was predicted by high paternal overprotection and low maternal care in females and by high maternal and paternal care in males. We investigated whether the association between PB and outcome can be explained by non-verbal interpersonal processes. We registered the patients' and interviewers' involvement behaviour during a pre-treatment interview. **Conclusions:** Convergence of these patient and interviewer displays during the interview acted upon the association between maternal care and outcome: the more similar these displays became, the stronger the association between mother care and outcome was.

S-48-04

Deficit of theory of mind found in remitted depression: Practical implication

S. Kanba, Y. Inoue, K. Yamada. *Graduate School of Medical Sciences, Dept. Neuropsychiatry, Fukuoka, Japan*

It is known that patients with schizophrenia have impaired theory of mind (ToM) during acute episodes. The aim of this study was to investigate ToM ability in patients remitted from the first episode of schizophrenia. In results, patients with schizophrenia showed statistically significant impairment in sequence, a second order false belief task and sum score in ToM task. No correlation was found between answers in any of the four areas of ToM and IQ. Our results suggest that ToM impairment can be detected not only in the acute episode as found in previous research, but also in remission from the first episode. Since the ToM impairment suggests a decline in the function of social relationships, the evaluation of ToM ability in patients with remitted schizophrenia may be a useful tool in providing treatments for better social adjustment. Previously, we have found that patients with major depression continued to have deficit in ToM ability after recovery. We will discuss the difference between the deficit in remitted schizophrenia and remitted depression.

Wednesday, April 6, 2005

S-68. Symposium: fMRI of emotion and cognition

Chairperson(s): Frank Schneider (Aachen, Germany), Ewald Moser (Wien, Austria)
08.30 - 10.00, Gasteig - Lecture Hall Library

S-68-01

Dynamic causal modelling of evoked brain responses

K. Friston, K. E. Stephan. *Functional Imaging Laboratory Institute of Neurology, London, United Kingdom*

Objective: We present an approach (DCM) to identifying dynamic input-state-output systems. Identification of the parameters proceeds in a Bayesian framework given the known, deterministic inputs and the observed responses of the [neuronal] system.

Methods: We develop this approach for the analysis of effective connectivity using experimentally designed inputs and fMRI and EEG responses. In this context, the parameters correspond to effective connectivity and, in particular, bilinear parameters reflect the changes in connectivity induced by inputs. The ensuing framework allows one to characterise experiments, conceptually, as an experimental manipulation of integration among brain regions (by contextual or trial-free inputs, like time or attentional set) that is perturbed or probed using evoked responses (to trial-bound inputs like stimuli).

Results: We show that changes in attentional set, adaptation of evoked responses in fMRI and specific ERP components such as the P300 can all be explained by changes in the coupling among brain regions. Furthermore, inferences about these changes can be made, in a connection-specific fashion using DCM.

Conclusion: As with previous analyses of effective connectivity, the focus is on experimentally induced changes in coupling. However, unlike previous approaches to connectivity in neuroimaging, the causal model ascribes responses to designed