the dimensional vantage point, careful neuropsychiatric diagnostic procedures remain mandatory.

(1) Verhoeven WMA, Tuinier S. The effect of buspirone on challenging behaviour in mentally retarded patients: an open prospective multiple-case study. Journal of Intellectual Disability Research, 40: 502–508; 1996.

SEC25-2
STRESS HORMONES AND IMPULSE REGULATION

S. Tuinier*, W.M.A. Verhoeven, Y.W.M.M. Van den Berg, J.H.H. Thijssen. *Vincent van Gogh Institute for Psychiatry, Venray, 5800 AA, The Netherlands*

The precise nature of impulsive behavior and some of its consequences such as aggression, self-injurious behavior or challenging behavior and other types of behavioral disinhibition is not well understood. In the case of outward directed aggressive behavior several clinical studies suggest an involvement of central serotonergic activity in subgroups of patients (Tuinier et al. 1996). The nature of aggressive behavior in mentally retarded subjects has been far less studied with respect to its biological background. Frequent manifestations of disordered behavioral control include self-injurious behavior and stereotyped movement disorder, that has been linked to disturbances in the availability of endogenous opioids, dopamine hypersensitivity and central serotonergic dysfunction. Since these biological parameters are also closely linked to the functional status of the stress system, we studied basal levels of the stress hormonal parameters ACTH, beta-endorphin, prolactin, cortisol, free cortisol and transcortin in 64 mentally retarded subjects with either self-injurious behavior and/or stereotyped behavior or without these phenomena. We found major effects on stress parameters of concomitantly prescribed anticonvulsants and oral contraceptives, no indication that beta-endorphin is related to these behavioral disorders and some support for the hypothesis that stereotyped behavior and self-injurious behavior are related to disordered stress homeostasis. This finding is also supported by the observation that mentally retarded subjects as a group might be more vulnerable to develop pathological states of arousal and might also possess less capacity to counteract deviations from their emotional and behavioral set point with serotonergic mechanisms.

(1) Tuinier S, Verhoeven WMA, Van Praag HM. Serotonin and disruptive behavior; A critical evaluation of the clinical data. Human Psychopharmacology 11; 469–482: 1996.

SEC25-3
BEHAVIORAL PHENOTYPE AND DISTURBED IMPULSE CONTROL

L.M.G. Curfs[1]*, K. Devriendt[2], A. Vogels[2], J.P. Fryns[2]. [1]*Department of Clinical Genetics Maastricht, University Maastricht, The Netherlands*
[2]*Center for Human Genetics, University Hospital of Leuven, Belgium*

Behavioral phenotypes are recognizable characteristic patterns of behavior associated with genetically determined disorders. For some of the so called genetically determined syndromes associated with mental retardation the characteristic pattern includes oppositional, explosive and at times aggressive behavioral features.

One of our behavioral phenotype research projects was aimed at clarifying and documenting these manifestations of disturbed impulse control behavior. These distinctive behavior characteristics for the demarcation of some of the genetically determined syndromes associated with mental retardation are reviewed for Prader-Willi syndrome, Velo-Cardio Facial syndrome, Smith-Magenis syndrome and a syndrome caused by a terminal deletion on chromosome 8p. Our experience indicates that patients with the association of mental subnormal development and disturbed impulse control should be examined by an experienced clinical geneticist.

SEC25-4
DIFFERENT DIAGNOSTIC SYSTEMS IN DESCRIBING AGGRESSION IN MENTAL RETARDATION

S.P. Tyrer[1]*, P.B. Moore[2]. [1]*Department of Psychiatry, Royal Victoria Infirmary, Newcastle upon Tyne; Prudhoe Hospital, Northumberland;* [2]*Department of Psychiatry, University of Newcastle on Tyne, UK*

There is no diagnostic entity of aggression in either of the two major classificatory schedules in psychiatry, DSM-IV and ICD-10. Although aggressive behaviour is common in many mental illnesses and personality disorders it has not been considered that any one psychiatric illness or personality disorder is defined by abnormal control of aggression. These two schedules recognise the existence of disorders of control of impulsivity as discreet diagnostic entities, depicted by the terms emotionally labile personality disorder and intermittent explosive disorder in DSM-IV. Within a sample of people with mental retardation it is only the rare chronic aggressive subject that falls into either of these two categories.

Thirty chronically aggressive mentally retarded subjects in hospital were examined closely according to ICD-10 and DSM-IV schedules. An attempt was also made to classify each patient according to Sovner's four domain classification of behaviour disturbance.

The results showed that only a few patients could be adequately classified under the heading of impulsive or antisocial personality disorders. The majority of patients showed irritability and aggression related to environmental changes. Most of the patients were only satisfactorily classified under the heading of organic personality disorder or syndrome on the basis of pre-existing brain damage responsible for the degree of intellectual impairment.

In the classification of aggression it may be more heuristically valuable to describe aggression according to the nature of the aggressive act, e.g. verbal, physical, destructive, self-harming.

S26. The impact of schizophrenia on the patient's life

Chairs: H Häfner (D), D Naber (D)

S26-1
HISTORY OF TREATMENT SYSTEMS AND THEIR CONSEQUENCES FOR THE LIFE OF SCHIZOPHRENICS

Giovanni de Girolamo. *Department of Mental Health, Azienda USL Città di Bologna, Bologna, Italy*

In the course of this century, treatment systems in psychiatry have underwent dramatic changes. From the asylum era of the first half of this century, there has been a sometimes gradual, sometimes irregular move in the direction of a community-based system of care delivered to geographically delimited catchment areas. People suffering from schizophrenia have been the main