

Personality and behavioural disorders

Sunday, April 3, 2005

S-06. Symposium: Cost-effective treatment of patients with borderline personality disorder and suicidal attempt

Chairperson(s): Antonio Andreoli (Geneva, Switzerland), R. Barbe (Pittsburgh, USA)

08.30 - 10.00, Holiday Inn - Room 3

S-06-01

Severe personality disorders: How organize the clinical framework for community mental health centers

M. Bassi. *Dipartimento di Salute Mentale Azienda USL di Bologna, Bologna, Italy*

Italian psychiatrists are finding on an increasingly more frequent basis that they must diagnose and treat a particular type of patient. These are not the traditional patients of public mental health services, such as people with psychotic, severe and persistent mental disorders, which these structures have by now been able to pinpoint and to whom they have been able to offer a series of solutions to the problem having to become “responsible” for their care on an intensive or prolonged basis, both in terms of pharmacological and psychosocial treatment. These patients meet with psychiatrists when they are urgently admitted or in the emergency room, whether they are examined at a Community Mental Health Center or in the emergency room of a general hospital in a big city. More frequently, psychiatrists encounter these “new patients” while providing psychiatric consulting services at so-called “borderline areas”. These are patients which have been examined for the first time by services for substance-related disorders, social services for homeless people or health services which are responsible for treating prisoners. The health and social workers which come into contact with these “new patients” soon realize that the difficulties in establishing a relationship in order to help the patient, the impulsivity with frequent return to the negative behavior, and the disturbed, aggressive or frankly antisocial behavior would suggest that these patients should undergo a psychiatric evaluation. In many of these cases, when a request is made for a timely evaluation, psychiatrists find themselves faced with young people, prevalently male, affected by a “impulsive cluster” personality disorder (in the majority of cases a borderline personality disorder or an antisocial personality disorder, which are distinct or in comorbidity), with a history of various duration of substance dependence or abuse, with

previous episodes of clear anti-social behavior and consequent problems of a legal or penal nature.

S-06-02

Borderline personality disorder and suicidal attempt: A 3 year follow-up

Y. Burnand, D. Maire. *R. Pirrotta, C. Damsa. Geneva, Switzerland*

This study was aimed to investigate the long-term outcome of borderline patients with suicidal attempt. Seventy-six patients with DSM IV borderline personality disorder and a self-poisoning severe enough to require intensive medical treatment at the emergency room of the Geneva general Hospital were prospectively follow-up during 3 years. At that occurrence reliable assessment was obtained for 71 of them (93%) on a battery of instruments including GAS scores, suicidal behaviour repetition and service consume. The data indicated fair to good outcome and no suicidal relapse in a large majority of these patients, but a minority of them had persistent patterns of severe suicidal behaviour and poor outcome. In addition, these patients had elevated service consume, high treatment costs and significant work disruption. These results suggest that presence of borderline syndrome has a complex relationship to outcome in those patients requiring emergency medical care for suicidal attempt. The study provides criteria to discriminate borderline patients subgroups requiring low/high dosage of intensive treatment at emergency treatment discharge.

S-06-03

Effective ingredients of psychiatric treatment for borderline patients with suicidal attempt

A. Andreoli, D. Maire, V. D Agostino. *Service d'accueil, d'urgences et de liaison psychiatriques, Geneva, Switzerland*

To further investigate the effectiveness and cost of combined treatment in borderline patients with suicidal attempt, we investigated four groups of borderline patients that had been assigned to: a) antidepressant medication and supportive case management, b) antidepressant medication and psychodynamic crisis intervention, c) antidepressant medication and psychodynamic psychotherapy, d) treatment as usual. Inclusion criteria were referred to the Geneva general hospital with DSM IV borderline personality disorder and self-poisoning suicidal attempt severe enough to require intensive medical treatment and an age between 20 and 65. The presence of psychotic symptoms, bipolar disorder, severe substance abuse/dependence and mental retardation were exclusion criteria. Repeated assessment were performed at intake, emergency treatment dis-

charge (up to one week) and 3-month follow-up. At 3-month follow-up all treatment groups exhibited little drop-out and self-damaging behaviour. Those patients with treatment as usual had, however, less adherence to treatment, higher treatment costs and more work disruption. In addition, provision of supplemental psychotherapy (psychodynamic crisis intervention or psychodynamic psychotherapy) was associated with better global functioning and increased adjustment at work. The data indicate that provision of supplemental psychotherapy is cost-effective in borderline patients with suicidal attempt.

Monday, April 4, 2005

S-26. Symposium: Neurobiological, genetic and developmental aspects of personality disorders

Chairperson(s): Kristina Fast (Munich, Germany), Birgit Völlm (Manchester, United Kingdom)
08.30 - 10.00, Holiday Inn - Room 3

S-26-01

On the interface of genetic and environmental factors in the neurobiology of antisocial personality disorder

S. C. Herpertz. *Rostock Universität Psychiatrie & Psychotherapie, Rostock, Germany*

There is a close interaction of genes and environment in the development of what is characteristic of an individual. On the one hand, several genes have been identified to be associated with antisocial, violent behavior and, on the other hand, there are specific psychosocial risk factors predisposing to an unfavorable social development. However, in the field of personality disorders, the antisocial type appears to be a particularly good example of the interplay between genetic and psychosocial factors. For example, genetic polymorphism of the MAO-A gene has been shown to moderate the effect of maltreatment on antisocial development. Psychophysiological abnormalities appear to constitute a biological mediator through which antisocial behavior is passed from one generation to the next. While significant heritability for phasic electrodermal activity has been reported from twin studies, psychosocial factors have also been shown to influence electrodermal reactivity. An overview of findings including neurophysiological and neuroimaging data will be presented that suggest that genetic and environmental acts do not act independently from each other but closely interact in the etiology of antisocial personality disorder.

S-26-02

The influence of juvenile socio-emotional experiences on the functional development of limbic brain systems

J. Bock. *Otto von Guericke University Institut der Biologie, Magdeburg, Germany*

Objective: Juvenile, emotionally modulated learning events, such as the formation of an emotional bond between a newborn animal and its mother, are fundamental for the establishment and maintenance of synaptic networks in the developing brain. Clinical, as well as animal studies, have been shown that disturbances of this emotional attachment lead to alterations of brain

organisation, that could influence the development of emotional and cognitive capabilities.

Results: During early pre- and postnatal development dramatic neuronal and synaptic changes occur in limbic cortical and subcortical brain areas. A number of studies have been shown that positive or negative emotional experiences have an enormous impact on these developmental processes. In particular, emotional experiences with the social environment lead, comparable to the principles of Darwin, to a process of synaptic selection and reorganization in regions of the limbic system. Recent findings show that synaptic networks are formed particularly in limbic brain regions, which are responsible for the adaptation of limbic functions to positive or negative environmental situations.

Conclusion: These early pre- and postnatal developmental processes, influenced by the neuromodulatory "emotion-systems" i.e. dopaminergic, serotonergic and noradrenergic fiber systems, are the brain biological basis for the cognitive and emotional behavioral development. Unfavourable environmental conditions such as pre- or postnatal stress and emotional deprivation lead to disturbances or retardation of the experience induced structural alterations and may underlie the development of psychosocially induced mental disorders.

S-26-03

Neurobiology of patients with borderline personality disorder: CNS imaging, neuropsychological and clinical symptoms

T. Zetzsche. *Ludwig-Maximilians-University, Munich, Germany*

Introduction: Borderline personality disorder (BPD) is associated with multiple symptoms, such as depressive syndromes and disturbances of impulse control. The pathogenesis of this disorder is not yet elucidated. In recent years several studies have been published which indicate that serious neurobiological alterations exist in BPD. Volume reductions of frontal cortex areas and the limbic system have been described. In addition, abnormal cerebral activation patterns in response to emotional stimuli, disturbances of pain perception and HPA axis dysregulation have been found. In our studies we tried to detect possible structural changes in the region of the amygdala and hippocampus and to find out if they are correlated with neuropsychological and clinical symptoms in BPD.

Methods: 25 female patients which met DSM IV diagnosis of BPD and 25 matched controls were enrolled. SKID I und II interviews were performed. Volumetric analysis of gray and white matter was enabled by using 1.5 T magnetom vision and an especially designed software program (BRAINS, Andreasen et al., 1992). As „regions of interest“ amygdala and hippocampus were defined. To evaluate depressive symptomatology the Hamilton rating scale (HAMD, 21-items) and to measure impulsive und aggressive behavior well established instruments were applied, e.g. Brown-Goodwin Life History of Aggression questionnaire (BGLHA).

Results: Hippocampal volume was reduced in BPD patients. An inverse correlation between hippocampal volume and increased aggression/impulsivity (BGLHA) was found. Amygdala volume was increased in BPD patients with co-morbid major depression compared to those without. There exists a positive correlation between amygdala volume and depressive symptoms (HAMD). Correlations between Imaging data and neuropsychological findings in BPD will be presented.

Discussion: Our findings can indicate an increased biological vulnerability in BPD patients. On the other hand structural brain