

decreased rCBF in superior frontal gyrus, right mesial (posterior hippocampus) and lateral temporal regions. Classic rCBF abnormalities seen in depressed patients appear to resolve following 10 weeks of VNS.

**Conclusion:** These early data suggest that response to VNS therapy is associated with normalization of resting rCBF patterns.

### P06.10

Auditory event-related potential and PET: functional correlations

M. Emri<sup>1</sup>\*, T. Glaub<sup>2</sup>, R. Berecz<sup>2</sup>, Z. Lengyel<sup>1</sup>, P. Mikecz<sup>1</sup>, E. Bartok<sup>2</sup>, L. Tron<sup>1</sup>, I. Degrell<sup>2</sup>. <sup>1</sup>University of Debrecen, PET Center; <sup>2</sup>University of Debrecen, Department of Psychiatry, Hungary

**Introduction:** The identification of functional connections in the human brain during cognitive task may help to understand the organization of higher brain functions. The present study was aimed to detect neuronal circuits involved in a simple cognitive task of auditory "odd-ball" paradigm by using Auditory Event Related Potential (A-ERP) and PET parallelly.

**Method:** Nine healthy volunteers were studied. The subjects underwent 2 tasks, while the evoked potential was recorded. Task 1 was the resting condition with non-target pure tones, while Task 2 contained a rare (target) tone in 20% at a random sequence. Regional cerebral blood flow (rCBF) was measured by the intravenous injection of 50 mCi O15-butanol. Voxel-by-voxel analysis was performed to determine parallel changes in two different brain-regions ( $R < +/-0.65$ ).

**Results and Conclusions:** Strong positive correlations were found between the identical areas of the bilateral frontal medial gyri, temporal medial gyri and parahippocampal regions. Strong negative correlations were found between insular regions and ipsilateral/contralateral prefrontal areas, basal ganglions and cerebellum. We conclude that complex cortical and subcortical functional connectivity is present during the "odd-ball" cognitive task.

### P06.11

Auditory event-related potential and PET

T. Glaub<sup>1</sup>\*, R. Berecz<sup>1</sup>, M. Emri<sup>2</sup>, A. Fekeshazy<sup>2</sup>, T. Miklovitz<sup>2</sup>, E. Bartok<sup>1</sup>, I. Degrell<sup>1</sup>, L. Tron<sup>2</sup>. <sup>1</sup>University of Debrecen, Department of Psychiatry; <sup>2</sup>University of Debrecen, PET Center, Hungary

**Introduction:** During cognition there is a selection in the brain according to the meaning or importance of the stimuli. Auditory Event Related Potential (A-ERP) in "odd-ball" paradigm is a model of this situation. The aim of our study was to identify the neuronal substrate of this process by using A-ERP and PET parallelly.

**Method:** Nine healthy volunteers were studied. The subjects underwent 2 tasks, while the evoked potential was recorded. Task 1 was the resting condition with non-target pure tones, while Task 2 contained a rare (target) tone in 20% at a random sequence. rCBF was measured by intravenous injection of 50 mCi O15-butanol. The perfusion change was tested using multisubject analysis with subject interaction with two conditions and four replications by SPM99 software package.  $p < 0.001$  was considered as significant when identifying of brain structures involved in the performance of the task.

**Result and Conclusions:** Cerebral blood flow increase was observed in the anterior cingulate area during A-ERP. Our results support data in the literature that the anterior cingulate is a generator of this ERP activity.

## P07. Child and adolescent psychiatry

### P07.01

Borderline personality disorder by children and teen-agers use of tales in therapy workshops

H. Scharbach\*. *Departement CHU, Nantes, France*

Symptomatic expression of borderline states by children and teenagers is situated between two pathological poles in a continuum. Syndrome of empty behaviour, with blank objectal relation, depressive retirement, in link with a failure of libidinal investment and mode of narcissistic supplying. Bad being, loss of self confidence, bad self esteem is observable and for other thing.

Agressive reaction, even violent affects emergence before feeling of helplessness, even of detriment.

The helplessness denial, sustained by manic defense, reinforce the omnipotence, the all powerful influence with attempt to enter into relation with somebody without regulation. Affect's expression appear bumpy, rough.

Psychopathic behaviour is in relation with denial of dependence of vulnerability and of anaclitic position.

That's a lot of forms with affective instability, impulsivity behaviour, attentional failure, bad emotional regulation, lack of creativity.

In the therapeutic project, the narration of fairy tales, tales, stories and for oldier, of myths (Persee, Herakies, Promethee, Siegfried, etc.) legends is positive to develop the capacity of attention, the emotional and affective control and to bring symbolic income.

Tales's narration gives an excellent opportunity to each of the partners involved to get in touch and to assimilate the cognitive schemes and the references of the others. They also allow as therapeutic techniques an assessment of cognitive functioning.

They permit to treat meta-cognitive disturbances so often meet in this narcissistic personality pathologies.

It is to underlining the fact that tales, fables, myths and legends help to refresh unconscious motifs, thus is providing access to the springs of the subconscious to creation and maturing.

### P07.02

Role of the family during adolescence

N. Zdanowicz\*, P. Janne, Ch. Reynaert. *Université Catholique de Louvain, Service de Psychosomatique et Psychopathologie, Belgium*

**Objectives:** to examine the differences in family bonds between a "normal" population of young subjects aged 13 to 25 years, and a population suffering from mental disorders.

**Method:** 814 "normal" young subjects completed the Olson questionnaire about their own family. These people were compared with 358 young subjects suffering from mental disorders.

**Results:** the young subjects in the healthy group came from families that were markedly more cohesive and adaptable than those in the "pathological" group. It also transpired that the young "pathological" patients preferentially stemmed from the family categories "disengaged-structured" and "disengaged-rigid" as defined by Olson. While gender had no influence in these two groups, age determined a progressive reduction in cohesion in the normal young subjects.

**Conclusions:** While "normal" adolescence is marked by a decrease in family cohesion with age, adolescents suffering from mental disorders come from families which are less cohesive and

adaptable from the outset compared with those of "normal" young people.

Key words: adolescents, MHLC, age, gender.

### P07.03

Free will and diminished responsibility of adolescents

L.O. Perezhogin\*. *Serbsky Research Center for Social and Forensic Psychiatry, Moscow, Russia*

**Objective:** 29 male and 2 female adolescents 14–18 years old with personality disorders, diagnosed by ICD-10 criteria, who made crimes, was examined. Most of crimes contained violent episodes. In two cases only dissociative personality disorder was diagnosed.

**Methods:** new own method – ranged scale for will disorders diagnostic was used. Psychopathological and pathopsychological methods had completed research.

**Results:** patients with personality disorders had severe will disorders include deficits of will actions, deficits of free locomotive and emotional regulation, active choice between motives, fixed locomotive and thinking strategies, free understanding of their free will disorder etc. Very often this patients had made serial crimes with one typed, universal, static strategy, with obligate violent components, for example: rapes, homicides. Patients with dissociative personality disorder had strongest will disorders from all examined group.

**Conclusions:** legal norms of diminished responsibility are included in Russian Criminal Code in 1997 (§ 22). There is no thoroughly formulated criteria for using § 22. Will disorders might be using as one criterion for § 22 in group of patients with personality disorder.

### P07.04

Long-treatment outcomes of adolescent depression with associated anxiety

I. Martzenkovsky\*, Y. Bikshaeva, I. Martzenkovskaya, A. Druginskaya, M. Rudzinskaya. *Child and Adolescent Psychiatry, Kiev, Ukraine*

**Objective:** Assess the efficacy of a new convenient formulation of cipramil in maintaining antidepressant response in adolescent reporting right baseline levels of anxiety.

**Methods:** Depressed patients remitting after 12 weeks of treatment with cipramil 20 mg/day were randomized to continuation treatment with a new weekly cipramil formulation, cipramil 20 mg/day, or placebo for up to 24 weeks. We studied 18 patients who met criteria for Major Depressive Disorder (single or recurrent) (DSM-IV) and inclusion criteria for HAMD<sub>17</sub>=18, CGI – severity = 4. Using baseline HAMD Anxiety / Somatization factor score, patients were stratified into high (>7) or low anxiety (=7) sub-groups using a median split. Efficacy of weekly and daily cipramil compared with placebo in maintaining response was assessed.

**Results:** Relapse rates for patients treated with daily or weekly cipramil were significantly lower than those of placebo treated patients. Remission rates of highly anxious adolescents were very similar for the two active drug treatments over 24 weeks of treatment.

**Conclusions:** The new convenient weekly cipramil formulation appears effective in maintaining remission in patient's high baseline levels of anxiety.

### P07.05

An open-label study of olanzapine in the first episode of schizophrenia in adolescents

M. Dabokowska\*. *Medical Academy, Department of Psychiatry, Bydgoszcz, Poland*

Olanzapine is a recently introduced atypical neuroleptic agent for which little information is available on its use in children and adolescents. 19 children and adolescents (age: 12–19 years, mean age 17 years) with an onset of DSM IV schizophrenia were treated with olanzapine (Zyprexa). The dose was from 5 mg to 20 mg once daily. The patients receiving olanzapine were evaluated from 8 weeks to 24 months each month with 1) the PANSS (total scores and subscales) 2) The Calgary Depression Scale 3) adverse events 4) learning possibility.

**Results:** In each month the proportion of subjects noticed improvement in subscales and total PANSS. The most quickly improvement was observed in positive symptoms (33% improvement in the first month), the slowest in negative symptoms (15% improvement during the first month of treatment), but finished improvement (in 18 months) in positive and negative symptoms was nearly the same (66% and 61% respectively). The most patients experienced weight gain (37%), somnolence 10%, akathisia 10%. 84% of patients during treatment could to continue school, 16% of adolescents did not learn (from too protective family or unsociable-pathological families). In 42% of adolescents noticed 50% improvement in the Calgary Depression Scale at the end of trial. 47% of group had a 50% improvement in the item of attention in PANSS at the end of assessment. These data provide preliminary evidence of the efficacy of olanzapine for adolescents and children with the first episode of schizophrenia. Olanzapine may become the first-line treatment for children and adolescent schizophrenia.

### P07.06

Effectiveness and tolerance of moclobemide in treatment of mood and anxiety disorders in adolescents

M. Dabokowska\*. *Medical Academy, Department of Psychiatry, Bydgoszcz, Poland*

Moclobemide is selective MAO-A inhibitor for which little information is available on its use in children and adolescents. 15 children and adolescents (age: 12–19 years, mean age 16 years) with mood and anxiety disorders: 5 patients with depressive syndrome, 5 patients with social phobia, 5 patients with separate anxious (school phobia) were treated with moclobemide. All were outpatients. The total dose was from 150 mg to 450 mg (twice daily). The patients receiving moclobemide were evaluated from 4 weeks to 6 months each month with: 1) CGI 2) adverse events 3) learning possibility.

**Results:** Risk factors for psychiatric disorders were: obstetric agents 1 person, genetic risks 7 persons, organic agents 1 person, abnormal family relationships 4 persons, alone mothers 3 persons. Very good and good efficacy was noticed in 75% of patients. Adverse events were observed in 13% of group. Good school function had 87% of adolescents. 13% of patients did not finish treatment because of adverse events. 1 patient during treatment with moclobemide had manic syndrome. The best efficacy noticed in patients with social phobia (100% of group). Moclobemide may become the first-line treatment for children and adolescent mood and anxiety disorders.