

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