

**P269**

Neuropsychical symptoms due to cerebrovascular changes

B. Burba, D. Gudiene, V. Grigaliuniene, O. Jankuviene, A. Jaras.  
*Department of Psychiatry, Kaunas University of Medicine, Kaunas, Lithuania*

Mental and neurological disorders due to cerebrovascular changes are quite frequent, but are very rarely analyzed in connection with morphological changes in blood vessels.

**Objective:** To analyze correlation between clinical symptoms and histological changes of human a.basilaris.

**Methods:** We retrospectively studied relation between histological changes of a.basilaris and psychoneurological state in 10 cases of 40-70 years old patients, who died by accident.

**Results:** Analyzing retrospectively case histories we found such symptoms in psychical neurological state: basilar syndrome, emotional lability, rapid changes of mood, asthenia. 6 patients were diagnosed basilar syndrome by neurologists, 4 patients were diagnosed symptoms of F 06 group (according to ICD-10). Histological changes in a.basilaris were reduced amount of elastic fibre in blood-vessel media, increased quantity of collagen fibre and widening of intima.

**Conclusions:** Most frequent symptoms correlating with a.basilaris structural changes were basilar syndrome and organic mood, anxiety disorders.

**P270**

A study on the polymorphism of IL-1Ra86bp,IL-1 $\beta$ exon5 gene and cognitive function in han chinese with TS

H.F. Chang<sup>1,2</sup>, W.D. Ji<sup>1</sup>, Y. Li<sup>1</sup>, B.Y. Guo<sup>3</sup>, D.L. Yang<sup>1</sup>.  
<sup>1</sup>Changning Mental Health Center, Shanghai, China <sup>2</sup>The Affiliated Hospital of Bio-X Center of Shanghai Jiaotong University, Shanghai, China <sup>3</sup>Jiading Mental Health Center, Shanghai, China

**Background and aims:** Tourette's syndrome (TS) is a childhood-onset neuro-psychiatric disorder characterised by multiple motor and vocal tics lasting more than one year. An immune-mediated mechanism involving molecular mimicry has been proposed for PANDAS (Paediatric autoimmune neuropsychiatric disorders associated with streptococcal infection). PANDAS may offer a new way to explore the pathogens of GTS. IL-1Ra86bp,IL-1 $\beta$ exon5 gene Polymorphism and Cognitive Function are studied in 86 Children with Tourette's Syndrome.

**Methods:** In the present study, we genotyped a large multiplex sample of GTS affected children for polymorphisms in IL-1Ra86bp,IL-1 $\beta$ exon5 genes. Associations were tested by the transmission disequilibrium test (TDT). 86 Han Chinese children with GTS were tested using a set of neuropsychological test (Stroop test, trail making test, verbal fluency test, modified Wisconsin Card sorting test) and compared with 51 healthy control group to understand the relationship between cognitive deficits and genetics.

**Results:** No evidence for transmission disequilibrium was found for polymorphisms of IL-1 Ra86bp,IL-1  $\beta$ exon5 gene in this GTS sample. The frequency of 410bp/240bp genotype and 240bp allele in combined ADHD were significantly different from GTS alone. Compared with normal children, The GTS group showed impairment on almost all psychological measures. No evidence show significantly difference among IL-1Ra86bp, IL-1 $\beta$ exon5 gene Polymorphism and Cognitive Function.

**Conclusions:** For the GTS+ADHD group, the 240bp allele of IL-1Ra gene Polymorphism perhaps is another risk factor.GTS patient

has memory, attention and executive function defect, these defects may have something to do with the prefrontal dopamine dysfunction.

**P271**

Alzheimer's or alzheimer-perusini's disease?

G.L. Conte<sup>1</sup>, M. Pomponi<sup>2</sup>. <sup>1</sup>D.H. Clinical Psychiatry, A. Gemelli Hospital, Rome, Italy <sup>2</sup>Institute of Psychiatry and Clinical Psychology, Sacred Heart Catholic University, A. Gemelli Hospital, Rome, Italy

For persons who suffer from Alzheimer's disease little changed since 1906, when Alois Alzheimer (Kraepelin's assistant) communicated to Psychiatric Convention of Tubinga the "Auguste D case". Auguste had been affected by an unknown type of dementia. After case presentation, no discussion followed. One year later was published an article of only two pages, describing extreme reduction of brain dimensions, neurons loss, presence of fibrils and plaques in the cortex, without any picture or hypothesis or comment. Should be remembered some historical notes in recognition of the forgotten Perusini's contribution. Exactly, a young psychiatrist of Roman school, Gaetano Perusini, went to Alzheimer's, and carried on the research. Perusini studied four clinical cases presented in 54 pages and 79 figures collected in four tables (1908 December). Perusini formulated hypothesis on the nature and origin of plaques; primarily discussed an aspect of the disease still relevant: the neuronal or vascular origin. Perusini noticed the action of a "cement" that glues fibrils (the beta-Amyloid). His work was published only in 1910 in a journal whose editors were Nissl and Alzheimer. In the same year, Kraepelin published a new edition of his treatise *Psychiatrie*, where he reported a new type of dementia discovered by Alzheimer. Perusini was not mentioned, although Kraepelin told about a group of clinical cases, while Alzheimer, at that particular time, had presented only one case.

**P272**

General paralysis a case report

M. Darghal. *Department of Neuropsychiatry, Centre de Sante Moulay Hassan, Kenitra, Morocco*

Syphilis is still one of the most common STDs (Sexually Transmitted Disease) among developing countries.

General paralysis is an impairment of mental function caused by damage to the brain from untreated syphilis; it is a frequent and serious disease.

A.M. is a 35 years old, married male with primary school education. He lives with his family in Kenitra. His first Complaints occurred two years ago by an attention deficit, auditory hallucinations, difficulty in learning and suspiciousness, and then other psychotic features (Delusions of persecution and reference, state of severe agitation, patient suffering from visual hallucinations, aggressive behavior) added.

There was nothing special in his previous personal and medical histories. In family history a brother had a schizophrenia disorder. This case had been hospitalized several time with various psychiatric diagnosis. Physical examination found to be normal. At the neurological examination, we found tremor. At the psychiatric examination his insight was absent and associations were loose in his thought content there were delusions of persecution and reference, and auditory hallucinations. Atypical features of the clinical picture and cognitive impairment led to further laboratory investigations. Diagnosis was verified with serological tests (VDRL, TPHA) in blood and cerebrospinal fluid (CSF).

A cerebral CT scan: brain atrophy more prominent in the Frontal region and major ventricular dilatation. The diagnosis of general paralysis was based on clinical manifestations (delusions and dementia) associated to a positive serology in serum and CSF. Patient was treated by a high dose penicillin-therapy in perfusion and neuroleptics.

### P273

Apathy correlates with dopamine uptake in neurodegenerative diseases. A spect study with partial volume effect correction

R. David<sup>1</sup>, M. Koulibaly<sup>2</sup>, J. Darcourt<sup>2</sup>, P.H. Robert<sup>1</sup>. <sup>1</sup> *Research and Memory Center, Department of Psychiatry, Pasteur Hospital, Nice, France* <sup>2</sup> *Department of Nuclear Medicine, Pasteur Hospital, Nice, France*

Apathy is present in several neuropsychiatric diseases. The main purpose of the study was to stress the relationship between apathy and striatal dopamine uptake in patients with Alzheimer's disease (AD) or Dementia with Lewy body (DLB).

**Methods:** 22 patients were included.

All patients had neuropsychological and behavioural examination including Mini Mental Test (MMSE), Neuropsychiatric Inventory (NPI), and UPDRS for the motor activity assessment. Apathy dimensions, emotional blunting, lack of initiative and lack of interest were assessed using the Apathy Inventory (IA). Patients DA striatal uptake were assessed by 123I-FP-CIT (DaTSCAN<sup>®</sup>) SPECT. A method of quantitative 3D measurement was used in order to allow a precise quantification of modifications affecting striatal cerebral structures.

**Results:** The two diagnostic subgroups were equivalent in term of age and MMSE score.

There were no correlations between the NPI delusion, hallucination, depression and anxiety score with DA uptake. There was a significant correlation between the IA total score and the bilateral putamen DA uptake. More specifically, lack of initiative significantly correlated with bilateral putamen DA uptake, whereas lack of interest significantly correlated with left caudate DA uptake. The UPDRS score was significantly correlated with left putamen and caudate DA uptake.

Using partial correlation coefficients controlling for the UPDRS score, the correlation remained significant between lack of initiative with right putamen DA uptake and left putamen DA uptake.

**Conclusion:** These results indicate that there is a relation between apathy and DA uptake, independent of motor activity.

### P274

Atomoxetine improved response inhibition in adults with ADHD

N. del Campo, S.R. Chamberlain, J. Dowson, U. Muller, L. Clark, T.W. Robbins, B.J. Sahakian. *Department of Psychiatry, University of Cambridge, Cambridge, United Kingdom*

**Background:** Atomoxetine, a highly selective noradrenaline reuptake inhibitor, shows efficacy in the treatment of ADHD. Despite evidence that atomoxetine improved inhibitory control in animals and healthy volunteers, studies had yet to explore short-term cognitive effects in patients with ADHD.

**Method:** The cognitive effects of a single oral dose of atomoxetine (60mg) were evaluated in n=22 adults with DSM-IV ADHD, using a within-subject placebo-controlled double-blind design. Assessment included the stop-signal test and Rapid Visual Information Processing test from the Cambridge Neuropsychological Test Automated Battery (CANTAB). Cardiovascular responses were monitored. Normative cognitive data from 20 healthy volunteers were collected for comparison.

**Results:** Atomoxetine was associated with shorter stop-signal reaction times ( $p < 0.05$ ) and lower numbers of commission errors ( $p < 0.05$ ) on the sustained attention task in the ADHD patients.

**Conclusions:** These findings suggest that atomoxetine exerts beneficial effects on aspects of inhibitory control in ADHD, which may belie the efficacy of this medication in the treatment of impulsive features of the disorder. These findings also have potential clinical implications for other impulse dysregulation disorders such as trichotillomania and Tourette's Syndrome.

### P275

Psychotic episode of multiple drug user after acute anticholinergic intoxication - a case report

N. Dostanic, M. Stankovic. *Department of Alcolism, Institute of Addiction, Belgrade, Serbia*

**Background:** In recent years there is the rising trend of anticholinergics use among high school students especially it is common to mix alcohol with anticholinergics. The characteristic features of anticholinergic intoxication are the rapid onset of alterations in mood, cognition and perception in the presence of a clear sensorium and following the ingestion of the drug in a commonly distributable form. But if psychotic symptoms are present in the absence of retained reality testing a diagnosis of substance-induced psychotic disorder may be warranted. Therefore, in some cases clinical picture presents a differential diagnostic dilemma.

**Method:** The authors present the case report of twenty-one year old male with dependence of multiple drug use (according the criteria of ICD-X), who was observed in department of alcoholism. In early adolescence period he used different psychoactive substances (opioids and non-opioid psychoactive substances). At last two years he episodically consumed anticholinergics. Upon the mixed use of alcohol with anticholinergics he experienced auditory hallucinations, rapid and incoherent speech and paranoid ideation. He acted out his imperative hallucinations aggressively with violent behavior.

During hospital treatment he was treated with antipsychotic medications, benzodiazepines and supportive and educational therapies.

**Results:** On this regiment psychotic symptoms resolved completely after two weeks.

**Conclusion:** Results of complete psychiatric-psychological examination did not indicate psychotic disorder.

### P276

Specific characteristics of prefrontal cortex functions in multiple sclerotic patients

H. Ekhtiari<sup>1,2</sup>, P. Jangouk<sup>2</sup>, A. Behzadi<sup>1,2</sup>, A. Mokri<sup>1,2</sup>, A. Jannati<sup>1,2</sup>, H. Safaei<sup>1,2</sup>, M. Sahraian<sup>2</sup>, J. Lotfi<sup>1,2</sup>. <sup>1</sup> *Iranian National Center of Addiction Studies, Tehran, Iran* <sup>2</sup> *Tehran University of Medical Sciences, Tehran, Iran*

Cognitive dysfunction is common in MS and can cause poor quality of life. Physical examination and EDSS can not reliably predict cognitive impairments. Frontal cortex atrophy predicts cognitive impairment in MS. Dorsolateral prefrontal cortex (DLPFC) processes logical thinking, working memory, attention and executive functions and ventro-medial pre-frontal cortex (VMPFC) processes emotional evaluations, social cognition and response inhibition. We assessed DLPFC and VMPFC dysfunctions in MS patients with neuropsychological assessment tasks.