

M. Anton<sup>1</sup>, P. Gil<sup>2</sup>, D. Sanchez-Matienzo<sup>3</sup>, C. Bas<sup>3</sup>. <sup>1</sup> *Complejo Hospitalario de Cáceres, Madrid, Spain* <sup>2</sup> *Hospital Clínico San Carlos, Madrid, Spain* <sup>3</sup> *Departamento Médico, Janssen-Cilag SA, Madrid, Spain*

**Background:** The prevalence of cerebro-vascular disease in patients with Alzheimer disease varies widely among studies depending on being autopsy-based or clinical-pathology or neuro-image based.

AD+CVD patients may show some degree of variability on the diagnoses and therapeutic approach across different clinical specialists.

**Aims:** To observe potential differences among physicians on the diagnosis and therapeutic approach of patients with AD+CVD.

**Methods:** This was a cross-sectional, multi-center, nation-wide study performed in Spain.

The investigators participants worked in three clinical specialties: neurologists, geriatricians and psychiatrists.

**Results:** A total of 107 investigators were involved in this study. Three out of four doctors (76%) were neurologists (81), 14% were geriatricians (15), and 8.4% were psychiatrists (9). The investigators included 720 patients diagnosed with AD+CVD.

Neuro-image techniques (NIT) and medical history (MH) were the most common methods of diagnosis. The scanner was performed in 69% AD+CVD patients, and magnetic resonance image was performed in 45%.

There were significant differences among physicians on the frequency of use of MH (98% of neurologists/geriatricians used MH vs. 85% of psychiatrists ( $p < 0.04$ )), and also on the use of NIT (99% of neurologists/geriatricians vs. 84% of psychiatrists ( $p < 0.0001$ )).

Galantamine (60%) and memantine+donepezil (19%) were the most common prescribed drugs by psychiatrists.

**Discussion:** Psychiatrists used primarily MH to diagnose patients with AD+CVD, while neurologists used more frequently NIT. Geriatricians used both methods and vascular risk factors for the diagnosis of AD+CVD.

More than a half of physicians used galantamine as first-election treatment in patients with AD+CVD.

## P266

Decreased platelet vesicular monoamine transporter binding capacity in tourette syndrome

D.H. Ben-Dor<sup>1</sup>, S. Zimerman<sup>2</sup>, Y. Sever<sup>1</sup>, N. Roz<sup>3</sup>, A. Apter<sup>2</sup>, M. Rehavi<sup>3</sup>, A. Weizman<sup>1</sup>. <sup>1</sup> *Adolescent Unit, Geha Mental Health Center, Rabin Medical Center, Beilinson Campus, Petach Tikva, Israel* <sup>2</sup> *Schneider Children's Medical Center of Israel, Petach Tikva, Israel* <sup>3</sup> *Department of Physiology and Pharmacology, Sackler Faculty of Medicine, Tel Aviv University, Tel Aviv, Israel*

**Background and aims:** The vesicular monoamine transporter (VMAT2) plays a major role in the synaptic accumulation and release of monoamines.

**Methods:** We assessed high affinity [3H]dihydrotrabazine binding to platelet VMAT2, in a group of untreated male Tourette's syndrome (TS) patients (age: 8-17.5 years,  $n=9$ ) and in a comparison group of age- and sex-matched healthy controls (age: 9-16 years,  $n=16$ ).

**Results:** Significantly decreased platelet VMAT2 density (Bmax) (-23%,  $P=0.016$ ) was observed in the TS patients. The affinity (Kd) of the ligand to platelet VMAT2 was similar in both groups.

**Conclusions:** If the lower platelet VMAT2 density also occurred in the brain, it may serve as an adaptive mechanism geared to decrease

dopamine storage in the presynaptic neurons and thereby to diminish the dopaminergic overactivity and ameliorate the movement disorder.

## P267

Neuropsychological differentiation of adults with attention deficit disorder and autism spectrum disorders

I. Bloemen, W. Verbeek, S. Tuinier. *Vincent van Gogh Institute, Venray, The Netherlands*

**Background:** Both Attention Deficit Hyperactivity Disorder (ADHD) and Autism Spectrum Disorders (ASD) are characterized by abnormalities in cognitive and executive domains. The diagnostic criteria of these neurodevelopmental disorders are described in behavioral terms. Criteria for developmental disorders have not been adjusted for adulthood, both in quantitative and qualitative terms. Furthermore there is a substantial symptomatic overlap on a behavioral and clinical level. Various executive functions have been proposed as cognitive endophenotypes.

**Methods:** Based on the literature we hypothesized: 1) larger discrepancies between V-IQ and P-IQ. 2) lower scores on verbal comprehension, vocabulary and comprehension in the ASD group. 3) ADHD low on working memory, high processing speed and the opposite in ASD. 4) ADHD perform poorly on fluency and inhibition and perform well on the Rey, the WISC and planning (ToL).

The comparison was done in each 20 patients with ADHD and ASD.

**Results:** it was only to a marginal extent possible to discriminate the groups on these neuropsychological functions.

**Conclusions:** There is a considerable overlap between ASD and ADHD on several neuropsychological functions.

## P268

Chronic psychotic disorder and cognitive decline associated with low-dose interferon- $\alpha$  treatment of hepatitis c: A case report

W. Drozd<sup>1,4</sup>, A. Borkowska<sup>1,4</sup>, M. Wilkosc<sup>1,4</sup>, M. Tomaszewska<sup>1,4</sup>, W. Halota<sup>2</sup>, M. Pawlowska<sup>2</sup>, D. Dybowska<sup>2</sup>, J.K. Rybakowski<sup>3</sup>. <sup>1</sup> *Clinical Neuropsychology Unit, Nicolaus Copernicus University, Torun, Poland* <sup>2</sup> *Department of Infectious Diseases and Hepatology, Nicolaus Copernicus University, Torun, Poland* <sup>3</sup> *Department of Adult Psychiatry, Poznan University of Medical Sciences, Poznan, Poland* <sup>4</sup> *Collegium Medicum, Bydgoszcz, Poland*

**Background:** Low-dose interferon- $\alpha$  is standard therapy for hepatitis C. Psychotic disorders have been described as a scarce complication of the treatment that resolves with its termination.

**Case description:** we present a patient with negative personal and familial psychiatric history who developed serious chronic psychotic disorder with persistent cognitive impairment on the level of dementia after seven month interferon- $\alpha$  therapy. Profound parkinsonian side-effects of neuroleptic treatment accompanied the disturbances.

**Conclusions:** Potentially severe brain consequences of long-term low-dose interferon- $\alpha$  therapy for hepatitis C in a susceptible individual may emerge. The underlying cause of the susceptibility remain obscure, however dopaminergic, opioid, serotonergic and glutaminergic pathways as well as HPA axis hypersensitivity might be supposed. This biological vulnerability might interact with the cytokine's action on brain. Relatively frequent and in some cases serious neuropsychiatric adverse effects of interferon- $\alpha$  therapy indicate the necessity of regular psychiatric consultations during the treatment.