References

[1]. Wigg K, Couto J, Feng Y, Crosbie J, Anderson B, Cate-Carter TD, Tannock R, Lovett MW, Humphries T, Kennedy JL, Ickowicz A, Pathare T, Roberts W, Malone M, Schachar R, Barr CL. 2005. Investigation of the relationship of attention deficit hyperactivity disorder to the EKN1 gene on chromosome 15q21. Scientific Studies of Reading 9(3): 261-283.

[2]. Wigg KG, Couto JM, Feng Y, Anderson B, Cate-Carter TD, Macciardi F, Tannock R, Lovett MW, Humphries TW, Barr CL. 2004. Support for EKN1 as the susceptibility locus for dyslexia on 15q21. Mol Psychiatry 13: 13.

S21.02

Adult ADHD and the Circadian rhythm

J.J.S. Kooij, M.M. Van Veen, A.M. Boonstra. *PsyQ, Psycho-Medical Programs, Program Adult ADHD, Den Haag, The Netherlands*

Background: Children with ADHD may have chronic sleeping problems, associated with circadian rhythm disturbances. Little is known about sleep in adults with ADHD.

Methods: We studied the prevalence and type of sleeping problems in 120 adults with ADHD using an interview questionnaire.

Results: 78% of the 120 adults with ADHD had difficulty to go to bed in time (between 1 and 3 am). Almost 70% reported sleep onset problems, more than 50% had difficulty sleeping through. Almost 70% had difficulty getting up in the morning and 62% felt sleepy during the day. In more than 60% these sleeping problems had been there all their lives. These results are very similar to earlier data presented by Dodson (Dodson, 1999). Several explanations for these sleeping problems may be considered (Kooij ea, 2001; Oosterloo ea, 2006; Boonstra ea, 2007). However, the frequently occurring sleeping pattern of being a 'nightowl', with restless sleep and difficulty getting up in the morning, may be associated with the delayed sleep phase syndrome, as was recently shown in children with ADHD and sleep onset problems (van der Heijden ea, 2006; van der Heijden ea, 2005; Weiss ea, 2006). We currently study the circadian rhytm in adults by measuring the Dim Light Melatonin Onset (DLMO) in saliva in ADHD patients with sleep onset problems (ADHD+SO), compared to ADHD patients without sleep onset problems (ADHD-SO).

Conclusions: About 70% of adults with ADHD have sleep onset problems compatible with a delayed sleep phase pattern. First data of DLMO in adult ADHD patients with and without sleep onset problems will be discussed.

References

[1]. Dodson, W. W. (1999). The prevalence and treatment of sleep disorders in adults with Attention Deficit / Hyperactivity Disorder: Presented at the American Psychiatric Association Annual Convention, Washington D.C.

[2]. Boonstra, A.M., Kooij, J.J.S., Oosterlaan, J., Sergeant, J.A., Buitelaar, J.K. & van Someren, E.J.W. Hyperactive night and day? Actigraphy studies in adult ADHD: a baseline comparison and the effect of methylphenidate. In press, 2007.

[3]. Kooij, J. J. S., Middelkoop, H. A. M., Van Gils, K., & Buitelaar, J. K. (2001). The effect of stimulants on nocturnal motor activity and sleep quality in adults with ADHD: An open-label case-control study. Journal of Clinical Psychiatry., 62(12), 952-956.

[4]. Oosterloo, M., Lammers, G. J., Overeem, S., de Noord, I., & Kooij, J. J. S. (2006). Possible confusion between primary hypersomnia and adult attention-deficit/hyperactivity disorder. Psychiatry Research, 143(2-3), 293-297.

[5]. van der Heijden, K. B., Smits, M. G., & Gunning, W. B. (2006). Sleep hygiene and actigraphically evaluated sleep characteristics in children with ADHD and chronic sleep onset insomnia. Journal of Sleep Research, 15(1), 55-62.

[6]. van der Heijden, K. B., Smits, M. G., Van Someren, E. J., & Gunning, W. B. (2005). Idiopathic chronic sleep onset insomnia in attention-deficit/hyperactivity disorder: a circadian rhythm sleep disorder. Chronobiology International, 22(3), 559-570.

[7]. Weiss, M. D., Wasdell, M. B., Bomben, M. M., Rea, K. J., & Freeman, R. D. (2006). Sleep hygiene and melatonin treatment for children and adolescents with ADHD and initial insomnia. Journal of the American Academy of Child & Adolescent Psychiatry, 45(5), 512-519.

S21.03

The prevalence of ADHD in adults with bipolar II disorder

M.B.J. Blom. *Department of Mood Disorders, Parnassia Psychiatric Institute, Den Haag, The Netherlands*

Background: Bipolar II disorder and ADHD share several clinical characteristics. Identifying patients with either Bipolar II or ADHD is therefore not an easy task. Little is known about the co-occurrence of both disorders and its treatment.

Methods: In a large outpatient clinic for Mood Disorders all patients with a bipolar II disorder were asked to fill in the ADHD rating scale, a screening instrument for adult ADHD. Patients who were above threshold were asked to participate in further diagnostics. This included a semi-structured interview for adult ADHD and an interview with an important other. Outcome was rated by two independent experts in adult ADHD.

Results: The total sample consisted of 62 bipolar II patients. Forty-two participated in the first screening. The ratings of 22 patients were not above threshold. Of the 20 patients with a positive score, 6 refused further participation. Of the 14 remaining, 11 satisfied full ADHD criteria in childhood as well as adulthood.

Patients with co-occurring ADHD were significantly more often female (82%) and had more relationships in the past. All other demographic variables were not significantly different. None of the treating physicians had prior to the study been aware of the diagnosis of ADHD in the bipolar II patients.

Conclusions: In adults with bipolar II disorder, ADHD is a common co-occurring disorder. Almost 18% of patients with bipolar II disorder also applied for a lifetime diagnosis of ADHD. Especially female patients with bipolar II disorder had relatively often co-occurring ADHD. Since this study was carried out in a specialized centre for mood disorders, further confirmation of this high prevalence rate should be object of further study.

S21.04

ADHD frequency and characteristics in students suffering from learning disabilities

I. Manor [1], S. Medad [1], Z. Zamishlani [1], N. Vurmbrand [2]. [1] *ADHD Clinic, Geha Mental Health Center, Petach Tikva, Israel* [2] *"MAHUT" Center, Seminar Hakibutzim,, Tel-Aviv, Israel*

Attention Deficit and Hyperactivity Disorder (ADHD) is a common disorder, estimated to occur in 4-6% of the adult population. Learning disabilities (LD) are a group of heterogenic disorders

https://doi.org/10.1016/j.eurpsy.2008.01.097 Published online by Cambridge University Press

that manifest in significant difficulties in acquisition and use of various learning abilities. LD were found in 10-20% of the general population. ADHD and LD share many common dysfunction characteristics in all daily activities. Studies show an overlap of 20-30% between the two disorders, and more psychometric disabilities, as well as a higher comorbidity rate and a lower SES status in adults who suffer from both than from LD alone. Yet, studies dealing with ADHD and LD comorbidity and its implication are few.

We wanted to examine ADHD frequency among students diagnosed as suffering from LD, and its correlation with other comorbidities, as well as to evaluate the efficacy of an ADHD screening questionnaire, and to estimate the rate of preliminary ADHD diagnosis and/or treatment in this group.

Methods: Population included 100 students, male and female, all aged 18 years old and above, studying in a specific center for LD. All students were diagnosed in the past as suffering from LD. No selection criteria had been administered. Methods were divided: 1) Screening questionnaire 2) ADHD assessment including: a structured interview (SCID), the Wender Utah Rating Scale (WURS), the adult ADHD self report scale (ASRS) and Test Of Variables of Attention (TOVA) with and without methylphenidate (MPH) challenge.

Results will be presented later

References

[1]. Mulas et al, Neuropsychological disorders in teenagers with attention deficit hyperactivity disorder. Oct 2006

[2]. Biederman et al. Impact of psychometrically defined deficits of executive functioning in adults with attention deficit hyperactivity disorder. Am J Psychiatry. 2006 Oct;163(10): 1673-5

[3]. Mikami et Hinshaw, Resilient Adolescent Adjustment Among Girls: Buffers of Childhood Peer Rejection and Attention-Deficit/ Hyperactivity Disorder. Oct 2006

Symposium: Endophenotypes of schizophrenia - recent findings and future prospects

S19.01

Cognitive endophenotypes: Why are we still trying to find them?

A. Szoke [1,2,3], F. Schurhoff [1,2,3], M. Leboyer [1,2,3]. [1] *Inserm, U 841, Creteil, France* [2] *Universite Paris 12, Faculte de Medecine, Creteil, France* [3] *AP-HP, GHU Albert Chenevier - Henri Mondor, Pole de Psychiatrie, Creteil, France*

Background: Despite a lot of initial enthusiasm and more than three decades of research, cognitive endophenotypes for psychiatric disorders are still to be found.

Methods: Based on a literature review and on our own research, we will analyse the reasons and consequences of this failure to find useful cognitive endophenotypes.

Results: Several commonly held ideas that proved to be over-optimistic, over-simplistic and finally false, have limited our ability to identify cognitive endophenotypes. Among those ideas, with deleterious methodological consequences, were the beliefs that neuro-cognitive validity is sufficient to ensure genetic validity, that cognitive measures and cognitive processes are equivalent and that cognitive processes have a simpler genetic architecture than psychiatric vulnerability. The perception of these initial errors modified our definition and expectations of cognitive endophenotypes and suggested ways to improve our chances to find them.

Several aspects of the study of cognitive endophenotypes demonstrated an initial excessive optimism, followed by disillusion and, now, a time for active search for realistic solutions. We will illustrate this process by an important feature for cognitive endophenotypes: the test-retest reliability. Although cognitive measures were initially considered stable, a systematic literature review revealed that most of them had problematic test-retest reliability. The use of such measures could lead to erroneous conclusions and limit their usefulness as cognitive endophenotypes.

Conclusions: Taking this parameter into consideration is important in selecting cognitive tests used to detect putative endophenotypes and in suggesting new approaches in the search for cognitive endophenotypes (for example the use of cognition questionnaires).

S19.02

Do putative endophenotypes go together? The case of schizotypy dimensions and neurocognitive domains

N. Barrantes-Vidal [1,2], M. Fatjo-Vilas [2], M. Aguilera [2], S. Miret [3], S. Campanera [3], M.E. Navarro [4], M.J. Munoz [4], L. Fananas [1]. [1] *Unitat D Antropologia, Departament de Biologia Animal. Facultat de Biologia, Universitat de Barcelona, Barcelona, Spain* [2] *Departament de Psicologia Clinica I de la Salut. Universitat Autonoma de Barcelona, Bellaterra, Barcelona, Spain* [3] *Centre de Salut Mental de Lleida, Servei de Psiquiatria I Drogodependencies, Hospital Santa Maria, Lleida, Spain* [4] *Area D Adolescents, Complex Assistencial En Salut Mental, Benito Menni. Sant Boi de Llobregat, Barcelona, Spain*

Background and Aims: The extent and causes of covariance between schizotypy and neurocognition is not well-known yet. Certain models conceive their association as necessary for the construct validity of schizotypy, whereas others view them as independently contributing to a multivariate endophenotype. It is also not clear whether those at increased genetic risk for schizophrenia present stronger covariance, reflecting an extra latent source of variance. We analysed their association within relatives of schizophrenia patients defined with FIGS as Presumed Carriers -PC- of the genetic risk for schizophrenia, Presumed Non Carriers -PNC-, and controls.

Methods: 108 healthy relatives of schizophrenia patients and 72 healthy controls were assessed with the SCID-II and completed the SPQ-B. Neurocognitive assessment: Letter-Number Sequencing (LNS), WCST, CPT-IP, verbal fluency, and logical memory.

Results: Partial correlations adjusting for age and education showed that within PC-relatives self-rated negative schizotypy was associated with lower LNS and CPT-IP; positive schizotypy was associated with CPT-IP, and disorganization with memory and failure to maintain set. Schizoid symptoms had an association with failure to maintain set (though not perseveration) and paranoid symptoms with memory. Within PNC-relatives, negative schizotypy was associated with lower verbal fluency and more perseverative errors. Within controls, positive schizotypy was associated with perseverative errors and both positive and negative dimensions were associated with verbal fluency.

Conclusions: Results indicate a wider array of covariation between relatives with presumed higher genetic liability. A consistent pattern of

https://doi.org/10.1016/j.eurpsy.2008.01.097 Published online by Cambridge University Press