S13. Symposium: VULNERABILITY FOR SCHIZOPHRENIA: EUROPEAN CLINICAL AND GENETIC HIGH RISK STUDIES

S13.01

Co-aggregation of cognitive, personality and genetic risk indicators of schizophrenia in an ongoing Catalan family study

N. Barrantes-Vidal [1,2], M. Fatjo-Vilas [1], M. Aguilera [1], S. Miret [3], M.E. Navarro [4], S. Campanera [3], 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, Barcelona, Spain* [3] *Centre de Salud 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: Neurocognitive deficits and schizotypal features are elevated in first-degree relatives of schizophrenia patients. However, the co-aggregation of these indicators is not well known. Some studies have found that neurocognitive deficits and schizotypy increase in severity with the density of family history of schizophrenia. Therefore, we studied in affected families a) whether the status of Presumed Carrier (PC) of the genetic risk for schizophrenia is associated with higher levels of neurocognitive deficits and schizotypic features and b) the relationship between schizotypy and neurocognition.

Methods: From an ongoing Catalan Multicentric Family Study on Schizophrenia, 70 families were included in this analysis. 90 non-psychotic parents of schizophrenic patients (age 50.7/8.8; education 10.3/4.04; IQ 96.2/14.6) were defined as PC if they had at least one first (apart of offspring) or second degree relative with schizophrenia spectrum disorders (FIGS), resulting in 17 PC and 73 non-PC. Schizotypic features were assessed with the SCID-II and the SPQ-B. Working memory (WM), executive functioning, sustained attention, verbal fluency and logical memory were also assessed.

Results: PC differed significantly from NPC on verbal working memory, even after controlling for IQ (d=0.8). They did not differ on any of the self-reported or interview measures of schizotypy. The negative schizotypic dimension was associated with more WCST-perseverative errors, and low scores in spatial-WM, verbal fluency and immediate/delayed logical memory.

Discussion: A large association was found between verbal-WM and the familial background of schizophrenia. Only negative features were associated with some neurocognitive functions, supporting the view of multiple independent dimensions or a pleiotropic expression of risk.

S13.02

Cognitive trait and state markers in subjects at genetic high risk

S.M. Lawrie, J. Harris, D.C.G. Owens, E.C. Johnstone. *Division of Psychiatry, University of Edinburgh, Edinburgh, Lothian, Scotland, United Kingdom*

Background: Prospective studies of young individuals at high genetic risk of schizophrenia allow investigation of whether any neurodevelopmental abnormalities usefully predict the development of the disorder.

Method: 163 high risk subjects with an initial mean age of 21 years were recruited as they had at least two relatives with schizophrenia. Together with 36 control subjects, they were examined at baseline (with developmental, clinical, neuropsychological and structural/functional MRI measures) and at 18 month intervals thereafter. Comparisons were made between those who developed schizophrenia, well controls, a well high risk group and those of the high risk sample with partial or isolated psychotic symptoms.

Results: 21 high risk subjects developed schizophrenia within an average time of two and a half years. A much larger number have shown isolated or partial psychotic symptoms and the whole high risk sample differed from controls on several variables. Those who developed schizophrenia differed from those with psychotic symptoms who did not on several measures including: interview and self-report measures of schizotypy, the AVLT1-5, and fMRI-BOLD responses on three separate tasks.

Conclusions: Schizophrenia is a disorder which has its origins very early in life, but develops over years. Its mode of inheritance affects many more individuals than will develop the illness and partial impairment can be found in them. Highly significant predictors of the development of schizophrenia are detectable years before onset.

S13.03

Childhood victimization and developmental expression of sub-clinical psychosis

I. Myin-Germeys, T. Lataster, J. van Os. *Department of Psychiatry and Neuropsychology, Maastricht University, Maastricht, The Netherlands*

Experiences of childhood trauma and victimization may be associated with adult psychosis. This association will be examined cross-sectionally and longitudinally in an adolescent sample from the general population. In an adolescent sample of 1290 14-year olds, the association between unwanted sexual experiences and being bullied on the one hand and psychotic experiences on the other, was examined. Both sexual trauma (OR: 4.8, 95% CI 2.3-10.1) and being bullied (OR 2.9, 95% CI 1.8-4.8) were strongly and independently associated with psychotic experiences. After a follow-up of 2 years, sexual trauma (OR: 5.7, 95% CI 2.5-12.9) and being bullied (OR: 2.1, 95% CI 1.1-3.9) remained significantly associated with psychosis-like experiences.

These results suggest that reported associations between childhood victimization and adult psychosis can be understood in a developmental framework of onset of at-risk mental states in early adolescence. It will be argued that the mechanism by which trauma is likely to impact on psychosis risk is through cognitive and emotional pathways on the one hand, and biological pathways, possibly involving dopamine sensitisation, on the other.

S13.04

Impact of schizophrenia candidate genes on schizotypy and cognitive endophenotypes at the population level

N.C. Stefanis [1,2,3], T.A. Trikalinos [4,5], D. Avramopoulos [1], N. Smyrnis [1,2], I. Evdokimidis [1], E.E. Ntzani [4], J.P. Ioannidis [4,5,6], C.N. Stefanis [1]. [1] *University Mental Health Research Institute, Athens, Greece* [2] *Department of Psychiatry, National and Kapodistrian University of Athens, Athens, Greece* [3] *Department of Psychological Medicine, King's College London, Institute of Psychiatry, London, United Kingdom* [4] *Clinical and Molecular Epidemiology Unit, Department of Hygiene and Epidemiology, University of Ioannina*

https://doi.org/10.1016/j.eurpsy.2007.01.078 Published online by Cambridge University Press