We hypothesize that similar pattern of positive and negative schizotypy resemble full schizophrenia, although less severe. Previous studies attributed to the different experimental conditions such as recording temperature and under specific ion composition.

Methods: A possible starting point for the treatment could be pharmacological activation of voltage-gated sodium channels (Nav) which have a pivotal role in action potential initiation. Of the four subtypes of Nav channels expressed in the CNS Nav 1.1 comprises the majority of the sodium current in FS-PV+ but not in pyramidal neurons. Based on this we looked for selective Nav 1.1 activators and found a recently published promising compound (Compound 3a, see Cresey et al., 2015) which has been shown to increase the electrical activity of FS-PV+ interneurons in the CA1 area of the hippocampus. However, the dysfunction in information processing found in schizophrenic patients is not only restricted to the hippocampus and high-order association cortices but also influences the sensory cortex. Thus, our aim was to explore the effect of the selective Nav 1.1 positive modulator Compound 3a on FS interneurons in the mouse somatosensory cortex. We performed whole-cell patch clamp recordings from mouse cortical brain slices and recorded the electrical activity of single FS cells before and after the drug application.

Results: Surprisingly the excitatory effect of the compound 3a could only partly be confirmed in the way that positive modulation of Nav1.1 in terms of action potential number and threshold only takes place under particular conditions, i.e., at physiological temperature and under specific ion compositions of the recording solutions.

Discussion: The discrepancy of our results from published data might be attributed to the different experimental conditions such as recording temperature and ionic composition of solutions and highlight the importance of selecting near physiological conditions during brain slice patch clamp experiments.

T77. DIAGNOSTIC AND NEUROCOGNITIVE CORRELATES OF SCHIZOTYPY WITHIN AND ACROSS THE PRONIA STUDY GROUPS

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Background: Schizotypy traits range from odd behaviors to symptoms that resemble full schizophrenia, although less severe. Previous studies associated different degrees of positive and negative schizotypal traits to variations in the persons’ cognitive profiles while others related them to the risk to develop psychosis. We hypothesize that similar pattern of positive and negative schizotypy traits characterize individuals at risk of psychosis and patients meeting the criteria for recent onset psychosis, although with different degrees of severity. Also, both should differ from depressed patients. Moreover, specific combinations of schizotypy traits and neurocognitive alterations should be associated to the different psychopathological profiles. The final goal of the study is to identify candidate predictors of risk of psychosis that will be used as features in next machine learning analyses.

Methods: The present is a multi-centric study that was conducted as part of the project titled ‘Personalised Prognostic Tools for Early Psychosis Management’ (PRONIA).

Results: We run i) a Multivariate Analysis of Covariance with ‘WSS subscales’ as dependent variable; ‘Group’ as between subject factor; ‘Age’ and ‘Gender’ as covariates; ii) a Multinomial logistic regression with ‘Group’ as dependent variable; iii) a Group as reference parameter; ‘WSS subscales’ and scores at the PCB’s tests as predictors; ‘Age’ and ‘Gender’ as covariates. ROP and CHR reported both positive and negative schizotypy traits, although only the negative symptoms involving social aspects were clearly evident in CHR. Also, ROP and CHR differed for the positive symptoms, as they were present but at a lower level in CHR than in ROP. ROD instead scored high at the negative symptoms. Interestingly, ROP, CHR and ROD did not differ between each other for the negative symptoms, probably reflecting the effect of the psychopathology on the patients’ general motivation to life.

Discussion: The regressions analysis highlighted different patterns of associations of WSS and neurocognitive scores with the clinical status. In particular, the scores at the MIS, PAS and SANs combined with the Rey Figure (delayed drawing), predicted that the participants were CHR; the MIS, PAS and SANs with measures of attention (CPT, DSST) predicted that the participant were ROP; the PAS; SANs and short-term memory (DS) predicted to be ROD.

T78. LONG-TERM PROGNOSIS OF SCHIZOPHRENIA - RESULTS FROM THE NORTHERN FINLAND BIRTH COHORT 1966

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