O-07-003

Neurocognitive deficits according to norms in adolescents with and without clinical high risk states of psychosis

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Objective: In the early detection of psychosis, neurocognitive predictors have been suggested to enhance predictive accuracy of current risk criteria. While mainly sample-dependent means of adult samples were used so far, a recent study of an adult sample used neurocognitive deficits defined according to test norms in order to facilitate use in individual prediction. Yet, data on child and adolescent samples are missing.

Methods: We aim to investigate the discriminative power of neurocognitive deficits defined according to norms in a child and adolescent sample (age 8–17). At the time of writing, 84 outpatients at-risk for psychosis (AtRisk; mean age = 15 ± 2 , 39 % male), 134 non-psychotic inpatients (ClinS; mean age = 14 ± 2 , 38 % male) and 124 subjects of a general population sample (GPS; mean age = 14 ± 3 , 48 % male) had been assessed with and compared on a neurocognitive test battery, including a verbal fluency (VF) test, the Digit-Symbol Test, TMT A and B, the Auditory Verbal Learning Test (AVLT) and the Subject Ordered Pointing Task.

Results: The GPS group was slightly younger than AtRisk and ClinS (Kruskal–Wallis test: Chi2(2) = 7.656, p = 0.022); no group differences were found with regard to gender and verbal IQ as a measure of premorbid general IQ. Compared to the other two groups, AtRisk more frequently exhibited deficits according to normative data in verbal memory (AVLT learning capacity; 22.4 % vs. 10.7 %; odds ratio, OR = 2.4, 95 % CI 1.3–4.6) and VF (48.8 % vs. 34.1 %; OR = 1.8, 95 % CI 1.1–3.0), while ClinS and GPS did not differ.

Conclusion: Partly in line with findings from adult samples, deficits in verbal memory and verbal fluency might be specifically associated with an at-risk mental state in children and adolescents—even when compared to a more severely ill inpatient group. Yet, the discriminative ability of these deficits and their predictive power needs further examination in larger samples and longitudinal studies.

Policy of full disclosure: This work is supported by a project funding grant from the Swiss National Science Foundation (320030_133120).

O-07-004

Jumping to conclusions in first episode psychosis

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Objective: Jumping to conclusions is commonly associated with psychotic patients. Nevertheless, the underpinning mechanism of jumping to conclusions still remains unclear. The question if jumping to conclusions is a trait or state in psychotic patients is unknown. As a trait could contribute to the formation of delusions and be part of the vulnerability of psychosis and as a state could be a factor mediating the maintenance of delusional symptoms. We want to analyze this trait in a group of first episode psychosis patients.

Methods: We have analyzed the prevalence of jumping to conclusions in 2 groups (patients with first episode psychosis and controls) using beads task. Sociodemo-graphic variables were collected. PANSS, SIS-R and CAPE scales were used to assess positive symptoms. WAIS III subtest was used to assess IQ. A lineal regression was conducted to determinate relation between positive symptoms, IQ and jumping to conclusions.

Results: A total of 61 first episode psychosis patients and 150 controls were evaluated. 44.3 % of first episode psychosis demonstrated jumping to conclusions reasoning bias versus 8.7 % of controls (OR = 2.3, 95 % CI 1.5–3.7, p < 0.0001). These differences maintained independent of positive symptoms, sex, years of studies and abuse of cannabis. A lower IQ was related with jumping to conclusions bias but after adjusted for other variables this relation lost strength.

Conclusion: So jumping to conclusions bias could be a trait of vulnerability to develop psychotic symptoms previous of onset of psychosis and independent of positive symptoms.

Policy of full disclosure: None.

O-07-005

When one's sense of agency goes wrong: overall decreased estimation of intervals and absent intentional binding in passivity symptoms of schizophrenia

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Objective: Individuals with passivity symptoms feel that they are no longer in control of their actions, thoughts and other somatic experiences and often describe these processes as being under the control of an external agent. The dysfunctional mechanisms underlying passivity symptoms are still poorly understood. Internal timing mechanisms and intentional binding are both closely linked to action perception and both have previously been shown to be altered in schizophrenia, with some evidence for more severe timing dysfunctions in passivity symptoms. The aim of this study was to assess time perception and intentional binding in people with schizophrenia, in 15 people with passivity symptoms, 24 people without passivity symptoms and 43 healthy controls.

Methods: This was achieved using an interval estimation procedure with 200, 400 and 600 ms intervals between a button press and a tone played through headphones and three movement conditions: intentional movements (active), externally-induced movements (passive) and observed movements of another agent (other).

Results: The slope of the perceived interval across intervals was significantly lower in people with schizophrenia. Both controls and people without passivity symptoms, but not those with passivity symptoms, reported an increase in the perceive interval after active movements as compared to passive movements. Controls, but not people without passivity symptoms, perceived intervals to be longer after active movements compared to othergenerated movements. People with passivity symptoms did not display any modulation of time perception by movements (intervals after active, passive and other movements perceived as the same).

Conclusion: Altogether, the results indicate an important role of time perception and intentional binding in schizophrenia. The absence of intentional binding in passivity symptoms may lead to an overreliance on external agency cues and, together with the reduced perception of intervals, lead to the subjective loss of agency over self-produced actions.

Policy of full disclosure: None.