

SES09.3

Neurocognitive dimensions characterizing first-time psychotic patients

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Background: Assessment of neurocognitive dysfunction in schizophrenia is hampered by the multitude of diagnostic tools available and the ad-hoc use of concepts for cognitive impairments measured by the given set of neuropsychological tests.

Aims: To identify the main dimensions of a neurocognitive assessment battery for patients with first episode psychosis and to evaluate their relationship to sex, age, education, diagnosis and symptoms.

Methods: Eight neuropsychological tests were given to 219 patients with first episode psychosis three months after start of therapy or at remission, whichever occurred first.

Results: The factor analysis indicated five dimensions: Working Memory (WM), Verbal Learning (VL), Executive Function (EF), Impulsivity (Im) and Motor Speed (MS). The index scores were weakly related to sex, age, diagnosis and GAF symptom and function scores. The MS score was significantly higher for men than for women, and the WM and VL scores were significantly correlated with years of education.

Conclusion: The study indicates that the tests measure five fairly independent dimensions that were only weakly related to age, sex, diagnosis or symptoms.

SES09.4

Relationship between positive, negative and cognitive symptoms

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Objectives: Different syndromes have been described in psychosis. Among these are positive, negative, disorganization, manic and depressive. These may have different pathophysiological backgrounds and precipitating factors. The aim of this communication was to analyze the literature and contribute empirically in an attempt to clarify the relationships between the symptom profiles and neurocognitive factors.

Method: Factor analysis and other relevant studies were compared for consistency of findings. From an early intervention study for patients with first episode psychosis (the TIPS study) over 200 patients were examined using PANSS and neuropsychological tests. Factor analysis revealed 5 neurocognitive dimensions.

Results: There is an overall tendency that positive symptomatology seems not correlated with neurocognitive impairment, while disorganization and especially negative syndrome is. Genetic studies suggest a genetic contribution to variation in disorganization, and to a lesser extent to negative and manic dimensions. A confounding factor is that side effects of traditional antipsychotics may give secondary negative symptoms.

Conclusions: Disorganization and negative syndrome seem correlated with neurocognitive impairment. Clinical and scientific implications will be discussed.

SES09.5

Mapping positive and negative symptoms using brain imaging

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The neurophysiological basis for positive and negative symptoms in patients with schizophrenic psychoses is still largely unknown. The brain imaging techniques MRI, fMRI and PET have introduced new possibilities to explore the localization of brain regions and systems involved in the manifestation of specific psychopathological phenomena. PET and fMRI recording of regional blood flow changes in patients with schizophrenia have demonstrated increased flow in superior and medial temporal cortex during the experience of auditory hallucinations. Reduced flow in prefrontal cortical regions has been reported in subjects with negative symptoms. Disorganized and paranoid symptoms appear to have more wide spread and diverse blood flow correlates. In general, few studies have been performed and most of them lack analyses of reliability and reproducibility. Molecular PET imaging of neuroreceptors and transporters using specific radioligands have so far demonstrated few correlations to psychopathological dimensions. However, PET studies of drug-induced dopamine release have demonstrated positive relationships to aspects of positive symptomatology. More systematic studies in patients experiencing specific aspects of psychopathology should be performed with several imaging modalities in the same patient to explore specificity and reproducibility of changes observed.

S33. Psychological treatments in affective disorders: recent developments

Chairs: E.S. Paykel (GB), C.B. Pull (L)

S33.1

Cognitive therapy for bipolar disorders

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Background: The efficacy and effectiveness of brief psychological therapies such as cognitive therapy (CT) are well established for unipolar disorders. However, treatment studies have always excluded individuals with bipolar disorders, so relatively little is known about the utility of psychological approaches in this disorder. This paper explores the feasibility and efficacy of using CT as an adjunct to usual treatment in bipolar disorders by reviewing key studies on cognitive therapy (CT) in bipolar disorders and reporting on an MRC pilot study.

Results: There are only five published studies available, and the largest sample is only 69 subjects. Some of these studies have focussed on selected areas such as medication adherence or monitoring and management of the prodromal phase, whilst others have used a more traditional CT approach tackling key problems that make the individual vulnerable to relapse. Despite the small literature, the data suggest that approaches targeted only at prodromes are more effective in reducing manic or hypomanic relapses rather than depressive relapse. A more refined CT approach used in the MRC pilot study appeared to be beneficial in improving functioning, treating bipolar depressive symptoms and preventing full manic relapse.

Conclusions: The use of CT in subjects with bipolar disorders requires modifications, is more complex than in unipolar disorders