

cannabis use is related to panic attacks, anxiety, depression, and low motivation. It would appear that frequent cannabis use during adolescence is predictive of later depression and anxiety. Cannabis has also been related to amotivational syndrome in chronic users. This disorder is characterized by a personal deterioration with loss of energy and work drive, but the validity of this syndrome remains uncertain. Epidemiological studies have shown a clear association between cannabis use and psychosis, mainly adult schizophreniform disorders. Recent studies have identified a higher frequency of disturbance in sensorium, irritability, affective disturbances, derealization/depersonalization, and visual hallucinations in cannabis induced psychosis than in acute schizophrenia psychosis. Schizophrenia with substance abuse has been associated with poor treatment compliance, increased rates of hospital admissions, suicide, violent behavior and unstable housing and homelessness. Cannabis use specifically has been correlated with the exacerbation of psychotic symptoms and increased tardive dyskinesia. It may be the case that schizophrenic patients are inclined to consume cannabis, either due to lowered impulse control or as a means of reducing negative symptoms. On the other hand, it may be that cannabis use itself either causes or precipitates psychosis. In short, the association between cannabis use, psychosis, depression, behavioral problems, tobacco smoking, excessive drinking and use of illicit drugs shows a severe pattern of comorbidity that may lead to further negative outcomes, and requires further study for the identification of appropriate treatments.

S06.03

An update on the neurobiology of cannabis addiction

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The endocannabinoid system has been involved in a variety of physiological functions, including the control of nociception, motor behaviour, learning/memory, reward, neuroprotection, food intake and metabolism. This system is mainly activated in response to external stimuli to help establish the steady-state homeostasis of other neurotransmitters and mediators. Recent studies have involved the endocannabinoid system in the common neurobiological substrate underlying drug addictive processes. This system participates in the primary rewarding effects of cannabinoids, nicotine, alcohol and opioids through the release of endocannabinoids in the ventral tegmental area. Endocannabinoids are also involved in the motivation to seek the drug by a dopamine-independent mechanism demonstrated for psychostimulants and opioids. The endocannabinoid system participates as well in relapse to drug-seeking behaviour by mediating the motivational effects of drug-related environmental stimuli and drug re-exposure. In agreement, clinical trials have revealed the effectiveness of the CB1 cannabinoid antagonist rimonabant to obtain smoking cessation. CB1 cannabinoid antagonists could represent a new generation of compounds to treat drug addiction.

S06.04

In vivo measurement of neuronal dopamine transporter in cannabis dependant subjects, with positron tomography and [11C]-PE2I

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Dopaminergic system within mesocorticolimbic circuit plays a crucial role in addictive behaviors. However, no data to date are available concerning the effect of cannabis addiction on dopaminergic neurotransmission in humans. The neuronal dopamine transporter (DAT) ensures the regulation of dopaminergic neurotransmission by the re-uptake of extracellular dopamine. Observation of DAT density anomalies within the mesocorticolimbic system in cannabis-dependant subjects could provide further evidence for the implication of dopaminergic dysfunction in cannabis addiction. Thus, this work aims at the study of DAT density in control, tobacco-dependents subjects and cannabis-dependants subjects, gender and age-paired with Positron Emission Tomography (PET).

Subjects are scanned on High Resolution Research Tomograph (HRRT) for one hour after injection of a selective DAT radioligand ([11C]-PE2I). The binding potential (BP) in regions of interest previously defined within the mesocorticolimbic circuit was calculated using a simplified reference tissue of Lammertsma in order to measure an index of DAT density. BP-obtained in each group: control, tobacco-dependents and cannabis-dependents subjects, were compared with t-tests. Preliminary results will be presented during the seminar.

S06.05

An update on state of the art treatment of cannabis dependence

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Abstract not available at the time of printing.

S07. Symposium: SOCIAL COGNITION IN SCHIZOPHRENIA: THE KEY FOR SUCCESSFUL CBT INTERVENTIONS (Organised by the AEP Section on Schizophrenia)

S07.01

Social cognition and theoretical framework

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In recent years, social cognition became a valuable construct for understanding the nature and disability of schizophrenia (Green et al, 2005), and different studies have pointed out for its potential as a mediator of relations between neurocognition and functional status in schizophrenia (Sergi et al, 2006).

This presentation aims to review the concept of social cognition, describe the key social cognitive domains, discuss the importance of social cognition in schizophrenia by highlighting its functional significance, and finally present a brief overview of the main methodological issues regarding research on some of the presented issues.

S07.02

Affect recognition in schizophrenia: impairments and treatment

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Objective: Impairments in affect recognition are well known in schizophrenia. Such impairments are known to be a trait-like characteristic in schizophrenia mostly unaffected by traditional treatment. Moreover they seem to play a crucial role in patients' poor social functioning. The present study should contribute to the still open question of treatment options for these impairments.

Methods: A special Training of Affect Recognition (TAR) was evaluated using a pre-post-control group design with three groups of about $n=25$ partly remitted schizophrenia patients each. To control for nonspecific effects of implicit cognitive training, TAR was compared with a Cognitive Remediation Training (CRT) aiming at improvement of basic neurocognitive functioning. To control for nonspecific effects the two active training groups were compared with a control group without additional training (CG).

Results: Patients under TAR showed an improvement in facial affect recognition, with recognition performance after training approaching the level of healthy controls from former studies. Patients under CRT and those without training (CG) did not show improvements in affect recognition, though patients under CRT improved in some memory functions.

Conclusions: Improvements in disturbed facial affect recognition in schizophrenia patients is not obtainable with a traditional cognitive remediation program like CRT, but needs a functional specific training like the newly developed TAR.

S07.03

Therapy of social cognition: Overview and empirical results

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Social cognition appears to be an important mediating factor between cognitive and social functioning in schizophrenia which may increase the efficacy of different cognitive-behavioural therapies. In fact, social cognition is becoming a specific target of these interventions, including psychoeducation, cognitive remediation, social skills training and cognitive therapy for positive symptoms. By means of a systematic literature review, main publications about possible efficacy of social cognition in four major languages (English, Spanish, French, and German) are selected. According to this review, main empirical results concerning therapy of social cognition in schizophrenia, both in research and clinical settings, are shown in this presentation. Finally, some practical recommendations about these therapies are provided.

S07.04

Social cognition scale (SCS): A newly developed assessment instrument

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There is general consensus that social cognition is a key cognitive dysfunction in schizophrenia. At the same time, the hypothesis that social cognition is an aspect of cognition that determines social functioning has been receiving more and more empirical support since it was first proposed a few years ago.

However, the actual definition of "social cognition" can be a confounding factor in this framework. The definition has been a matter of debate in literature and only recently has some consensus emerged about the aspects that constitute "social cognition" (emotion perception, theory of mind, social perception, attributional style, social scheme). As a consequence, most of the time research in this area only considers some of these aspects, probably because the

instruments available to measure social cognition measure these aspects individually and not social cognition globally.

The SCS (social cognition scale) is an instrument under development with the goal of measuring together some of the components of social cognition, specifically: identification of stimuli, emotion perception, and social perception. Results show that the social perception of the patients who participated in the social perception program has improved. Patients that have received training in social perception learn to gather more information from an image, and to make more adequate interpretations.

S07.05

Integrated neurocognitive therapy for schizophrenia patients (INT)

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During the past two years we designed a cognitive-behavioural group therapy program (INT) as further development of the cognitive part of Integrated Psychological Therapy (IPT). INT is partly computer based and intends to reconstitute and compensate neuro- and social cognitive (dys-)functions. The program is embedded in the daily living context of the patients and starts from their resources with a special focus on facilitating intrinsic motivation. The INT-manual contains exercises to improve the following (MATRICS) areas: Speed of processing, attention/vigilance, verbal and visual learning and memory, working memory, reasoning and problem solving, emotional and social perception, social schema and emotion regulation.

Currently we evaluate INT in a randomized multi-centre study in Switzerland and Germany. INT is compared with TAU. Outpatients with a diagnosis of schizophrenia (DSM-IV) are included. Assessments are applied before and after therapy with a 1 year follow-up. Additionally the therapy process is evaluated. Assessment instruments measure neuro- and social cognition, psychopathology, social functioning, quality of life, expectation of self-efficacy and therapy motivation. Patients receive 30 therapy sessions each lasting 90 minutes for 15 weeks. During the first study year 44 patients participated (23 for INT and 21 for TAU groups). First results (pre- post assessments) show better outcome of INT patients in neurocognitive variables, emotion perception, self-rated motivation and self-efficacy. Up to now we didn't find a significant influence on social functioning and on psychopathology. Further results, especially data of the follow-up have to confirm the significance of the newly developed therapy program within other rehabilitation approaches.

W01.Workshop: PROBLEMS IN THE PROVISION OF PSYCHIATRIC SERVICES IN EUROPE (Organized by the European Division of the Royal College of Psychiatrists)

W01

Problems in the provision of psychiatric services in Europe

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The workshop deals with various aspects of the provision of psychiatric services in Europe in general and in selected European countries.

The differences in the provision of psychiatric care between East and West will be highlighted and the need to channel the recommended action