S14.02

Cannabidiol as an antipsychotic agent

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Background: The human endocannabinoid system interacts with various neurotransmitter systems and the endocannabinoid anandamide was found significantly elevated in CSF and inversely correlated to psychopathology (Giuffrida et al. 2004) providing a link to the neurobiology of schizophrenia. While delta-9-tetrahydrocannabinol, the psychoactive compound of Cannabis sativa, shows psychedelic properties, the major herbal cannabinoid compound cannabidiol was suggested recently a re-uptake inhibitor of anandamide. In addition potential antipsychotic properties have been hypothesized.

Methods: We performed an explorative, 4-week, double-blind, controlled clinical trial on the effects of purified cannabidiol in acute schizophrenia compared to the antipsychotic amisulpride. The antipsychotic properties of both drugs were the primary target of the study. Furthermore, side-effects and anxiolytic capabilities of both treatments were investigated.

Results: 42 patients fulfilling DSM-IV criteria of acute paranoid schizophrenia or schizophreniform psychosis participated in the study. Both treatments were associated with a significant decrease of psychotic symptoms after 2 and 4 weeks as assessed by BPRS and PANSS. However, there was no statistical difference between both treatment groups. In contrast, cannabidiol induced significantly less side effects (EPS, increase in prolactin, weight gain) when compared to amisulpride.

Conclusions: Cannabidiol proved substantial antipsychotic properties in acute schizophrenia. This is in line with our suggestion of an adaptive role of the endocannabinoid system in paranoid schizophrenia, and raises further evidence that this adaptive mechanism may represent a valuable target for antipsychotic treatment strategies.

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S14.03

Anxiolytic effects of cannabidiol

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Background and Aims: Cannabidiol (CBD) constitutes up to 40% of cannabis sativa plant and has quite different psychological effects to the plant's best-known constituent, delta-9-tetrahydrocannabinol (delta-9-THC). This study examines the current knowledge of the effects of CBD on anxiety.

Method: Articles were identified through a search of MEDLINE using the key word cannabidiol and anxiety. No search limits were included. Additional references were located through review of the bibliographies of the articles identified.

Results: In animal studies CBD has shown similar effects to anxiolytic drugs in conditioned emotional paradigms, the Vogel conflict test, and the elevated plus maze test. In humans, oral administration of CBD in healthy volunteers decreases and antagonizes the anxiogenic effect of high doses of delta-9-THC. CBD may thus posses inherent anxiolytic properties unrelated to THC-type activity. This is consistent with its anxiolytic effect on anxiety elicited by simulated public speaking test. In addition, SPECT and fMRI neuroimaging studies have confirmed that CBD has anti-anxiety properties and that these effects are mediated by an action on limbic and paralimbic brain areas.

Conclusions: These results support the hypothesis that CBD may be a future therapeutic option for anxiety. However, future studies of CBD in clinical anxiety such as panic and social anxiety disorder and comparative studies of its anxiolytic effects with those produced by benzodiazepines and other anti-anxiety compounds are clearly indicated.

S14.04

CBD and the neural correlates of anxiety

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Aims: The study sought to examine the neurophysiological effects of cannabidiol (CBD) on the emotional processing using functional Magnetic Resonance Imaging (fMRI).

Method: Fifteen healthy male participants (age range 18-35) with a lifetime exposure to cannabis of 15 times or less were recruited in a double blind event-related fMRI design. Prior to each scanning session, participants were given an oral dose of either 600mg CBD or a placebo. The blood levels of drugs were monitored via an intravenous line, while systolic and diastolic blood pressure and heart rate (beats per minute) were recorded manually. During the scan, subjects were presented with 10 different facial identities, each identity expressing 50% or 100% intensities of fear or a neutral expression. Neuropsychological performance and symptoms ratings were recorded at baseline, immediately before scanning (1 hr), immediately after scanning (2 hr), and one hour post scanning (3 hr).

Results: CBD had no significant effect on the gender discrimination task. Reaction times were significantly faster when processing 100% fearful faces than compared to 50% fearful and neutral faces. CBD had a significant effect on brain activation in response to faces with emotional expressions, decreasing activation in the right posterior cingulate gyrus and in the right cerebellum, when compared to placebo. Furthermore, a significant interaction effect was observed. In the right cingulate gyrus CBD attenuated activation during the processing of intense fearful faces but had no effect of neural response to neutral or mild fearful faces.

Conclusion: CBD significantly modulates the neurophysiological response associated with anxiety.

S14.05

Cannabis and psychosis

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Cannabis use is approximately twice as high among people with schizophrenia as among the general population. Evidence for cannabis use predisposing to psychoses later in life came many years ago from a study of Swedish conscripts. A dose-response relationship was observed

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between cannabis use at conscription and diagnosis of schizophrenia 15 years later. In 2002, similar findings were reported from The Netherlands where cannabis use was found to increase the risk of psychosis in psychosis-free individuals. A birth cohort study from Christchurch examined the relationship between cannabis use and the development of schizophrenia. Individuals who were cannabis dependent at age 18 years had a 3.7-fold increased risk of psychotic symptoms than those who were not cannabis dependent. Furthermore, the development of psychotic symptoms tended to decrease the consumption of cannabis. The Dunedin study showed that individuals using cannabis at ages 15 and 18 years had increased rates of developing psychotic symptoms, and carriers of the COMT val allele were most likely to develop schizophreniform psychosis after adolescent cannabis use street drug users know that cannabis can induce delusions (though not hallucinations). There is also some preliminary evidence that one of the reasons for the increase in the incidence of schizophrenia is south London is the increased consumption of cannabis. Our most recent studies concern the mechanism of action of cannabis.

W05. Workshop: NEUROPSYCHIATRIC SYMPTOMS MANAGEMENT IN HIV POSITIVE PATIENTS: A CASE DISCUSSION

W05

Neuropsychiatric symptoms management in HIV positive patients: a case discussion

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Abstract not available at the time of printing

S15. Symposium: TRANSITION FROM PSYCHIATRIC IN PATIENT TO COMMUNITY CARE: A EUROPEAN PERSPECTIVE (Organised By The AEP Section On Epidemiology And Social Psychiatry)

S15.01

Effect on outcomes of advance statements of patient preferences

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An 'advance statement' allows a patient to state treatment preferences in anticipation of a time in the future when, as a result of a mental disorder or disability, he or she may no longer be able to make treatment decisions. A number of types of advance statements in psychiatry can be described: 'advance directives' (and 'facilitated advance directives'), 'crisis cards' and 'joint crisis plans'. They differ according to a number of characteristics – the degree to which they have legal force, whether the clinical team is involved in their formulation, and whether a third party acts as a facilitator. There is accumulating evidence that some forms of advance statement empower patients and reduce the need for coercive treatments. The results of a randomized controlled trial of 'joint crisis plans' carried out by our research team in SE England will be discussed. A significant reduction in compulsory admissions to hospital was an important finding.

S15.02

Deinstitutionalization in the Netherlands and the effectiveness of act to maintain contact with the severe mentally ill

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Background and Aims: Deinstitutionalisation may put part of the severe mentally ill patients at risk to deteriorate in the community, mainly because they are difficult to engage with services. Assertive community treatment (ACT) is widely seen as an adequate answer for these difficult to engage patients. ACT is now rapidly implemented in many European mental health services, but recently the evidence base is questioned. Positive results of randomised trials in the US could not be replicated in the UK.

Method: In Groningen (The Netherlands) a psychiatric case register (PCR) is in operation since 1986, and now covers a catchment area of 1.6 million inhabitants. It is a perfect tool to study the transition from inpatient to community care.

We did a randomized controlled trial (RCT) to study the effectiveness of the first ACT team in our region, using the PCR to measure primary outcomes. It is the only RCT of ACT in the Netherlands. In total 118 patients were randomized to two conditions. The primary research questions were:

- Is ACT better than standard care in maintaining contact with patients?
- Is ACT better than standard care in reducing the use of inpatient care?

Results: ACT was superior in engaging patients to services, but no effect on the use of inpatient beds were found. Moreover, we did not find benefits in functioning, quality of life and unmet needs.

Conclusions: Too many patients are lost in standard care and therefore we highly value the sustained contact ability of ACT.

S15.03

An overview of the Nordic comparative study on sectorized psychiatry 1987 - 2000

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The aims of the study were to investigate how the characteristics of the psychiatric services, the environmental factors and the patient characteristics are related to contact rates and use of psychiatric services.

The study included all new patients contacting the psychiatric services during one year in 7 Nordic catchment areas. For each patient a 1-year follow-up of service use in terms of inpatient care, day

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