

excitatory activities. Two QEEG profiles of first-generation antipsychotics may be differentiated: a) chlorpromazine-type profile, characterized by an increase in delta/theta and a decrease in alpha and beta power spectra, and b) haloperidol-type profile, which exhibits no significant change in delta/theta frequency band but increase of alpha and alpha adjacent beta activity. The second generation antipsychotics have different QEEG and LORETA profiles probably reflecting their different mechanism of action. Clozapine produces an increase of delta, theta and alpha1 and decrease of alpha2 and fast beta activities. Comparing to antipsychotic-naïve schizophrenics, clozapine-treated patients showed an excess of delta and theta activities in anterior cingulate and medial frontal cortex. QEEG profile of olanzapine is similar to clozapine, whereas tomography show slightly different pattern (decrease of alpha1-beta activities in the occipital cortex and posterior limbic structures and decrease of beta3 sources in the fronto-temporal cortex and anterior cingulum). Risperidone increased current density in frontal regions for delta, theta and alpha1 in healthy subjects, whereas we found no changes in LORETA between risperidone-treated and antipsychotic-naïve patients. According to 'key-lock principle' the pharmaco-EEG topography and tomography could be helpful in the optimization of antipsychotic therapy.

Supported by the projects IGA MZCR NR9330-3/2007 and MSMTCR1M0517.

S44.03

ERP changes induced by antipsychotic drugs

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Background and Aims: Second-generation antipsychotics (SGA) are thought to have a more favorable impact on neurocognitive functions with respect to first-generation antipsychotics (FGAs). Event-related potentials (ERPs) represent valuable tools in the assessment of cognitive effects of psychotropic drugs; however, few ERP studies investigated antipsychotic drug effects on neurocognition in human subjects.

The present ERP, double-blind, cross-over study was carried out in 12 male healthy subjects to investigate the effects of a single oral dose of haloperidol, placebo or risperidone on effortful and automatic allocation of attentional resources to auditory stimuli.

Methods: ERPs were recorded from 30 unipolar leads (0.5-70 Hz bandpass, 256 Hz sampling rate), during a three-tone oddball task in which target, standard and rare-nontarget tones were randomly presented. Subjects had to press a button when hearing a target tone, while ignoring both standard and rare-nontarget stimuli.

P3 for target (P3b) and rare-nontarget stimuli (P3a) were identified at Cz and Pz leads. Amplitude maps at peak latency were then compared across conditions. If a significant drug effect was obtained, changes in the cortical sources of P3 were analyzed using Low-Resolution Electromagnetic Tomography (LORETA).

Results: No change was observed for P3b. P3a amplitude was increased by risperidone, at midline and right centro-parietal regions, but not by haloperidol. No change was observed in P3a cortical generators.

Conclusions: P3a, an index of the automatic allocation of attentional resources, is increased only by risperidone, suggesting a favorable effect of this SGA on orienting processes.

S44.04

Sleep EEG changes induced by antipsychotics

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Our standpoint for characterization of any drugs on sleep is based on three issues: 1) Assessment of drug induced effects on sleep in healthy young volunteers leads to unbiased conclusions about the pharmacological effects of a compound per se. 2) Working hypothesis underlying the scenario states that electrophysiological changes are directly related to the biochemical changes each compound induces in the brain. 3) Only changes on sleep macrostructure do not provide enough information for documenting pharmacological effects on sleep EEG. From a pharmacological perspective, second generation antipsychotic, as a class, may be defined in part as agents with simultaneously serotonin 2A and dopamine 2 antagonist properties. However, no two agents have exactly identical properties, including multiple pharmacologic actions at serotonin and dopamine receptor subtypes and multiple pharmacologic actions at other neurotransmitter receptors. Current knowledge about the parts played by the different transmitters on the control of the sleep-wake continuum, although important, is far from being clearly established. Availability of EEG sleep data on the effects of antipsychotic drugs is more than sparse. No attempts have been made to determine short-term, intermediate-term, or long-term effects. Questions of rebound following withdrawal or of tolerance have not been addressed. Up to date the most robust finding dealing with sleep EEG changes and second generation of antipsychotics is the increase of slow wave sleep (SWS) after drugs, as olanzapine, which show potent 5HT2A/2C antagonism activity. Further adequately designed, justified and analysed studies are certainly needed to advance in the field.

Symposium: Novel perspectives in prevention of suicidal behaviours

S35.01

Suicide prevention "for the person" - A subjectivistic approach outgoing from an European perspective

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The World Psychiatric Association has recently launched its institutional program "Psychiatry for the Person", with the aim to introduce a more subjectivistic and individual centred approach in diagnosing, treating and monitoring psychiatric disorders as human conditions.

Suicide prevention "for the person" seems here to be one of the most important fields in applying these principles. The suicidal person is influenced by his/her genetic predisposition and personality traits, his/her specific psychiatric disorder or dysfunction in biological and social framework, his/her individual psychosocial and existential

general and acute life circumstances and exists in a concrete life-threatening situation.

This together with different grades of competence or incompetency, decompensation or functional break downs influences the individuals capacity to cope with the suicidal situation and has to be encountered with in an individual and even cultural sensitive suicide preventive ad-hoc approach.

Concrete examples will be given outgoing from a description of depressive and psychotic persons in a specific suicidal situation and strategies will be described.

S35.02

Detection, evaluation and support for suicidal crisis : A French teaching program for caregivers

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France is among European Countries with alarmingly high rates of suicide (around

11 000 deaths/year) and suicide attempts (\approx 160 000/year). Suicide stands particularly high in certain regions and among young people.

In October 2000, the French Federation of Psychiatric Societies ("Fédération Française de Psychiatrie") and the National Health Agency ("Haute Autorité de Santé") organized a Consensus Conference entitled : "How to detect and manage suicidal crisis", which was the starting point for launching a national training Program aimed at physicians and caregivers. Several academics (psychiatrists and psychologists) were trained for each of the French "regions" who, in turn, had to teach and train "first line" caregivers locally, throughout the country.

The aims of the National Program were to 1) increase awareness of the "first line" resource persons and caregivers 2) provide simple pragmatic and immediately usable technical skills to caregivers and 3) use interactive sessions based on role-playing and case-work on real cases.

The Program, as it was developed and organized in Lorraine will be presented

Symposium: Alcoholism and drug addiction: Young researchers symposium

S63.01

Benzodiazepines vs Clomethiazol in alcohol withdrawal treatment

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Whereas in Germany clomethiazol has been the standard treatment for alcohol withdrawal, in the U.S. benzodiazepine treatment is used as the standard treatment. Recently there has been some discussion if the standard treatment in Germany should be reconsidered. Up to now there is no study giving a valid argument for this change, but there are clinical observations favouring benzodiazepines. In a retrospective study we are evaluating around 800 inpatient alcohol withdrawals in the last two years in order to give better evidence on which medication to choose and to establish a therapeutic regimen apart from the "intuitive" medication.. About 80% of the patients received clomethiazol as a withdrawal medication, while the rest

received either diazepam or oxazepam, usually in case of a contraindication for clomethiazol (e.g. pulmonary disorders). Preliminary results show that benzodiazepines have equal effectiveness and tolerability, despite the negative selection of the subsample.

S63.02

Decision making and addiction - can addicts learn to forgo immediate reward?

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Decision making tasks such as the Iowa Gambling Task and Rogers' Decision Making Task have been used to consistently identify decision making problems in addict samples. The role of the Ventromedial Prefrontal Cortex (VmPFC) and Orbital Frontal Cortex (OFC) have been linked to impaired decision making through fMRI studies and comparison studies with patients who have suffered bilateral damage to the VmPFC. These regions have been associated to traits, in addicts, such as dysfunctional inhibitory control, hypersensitivity to reward, difficulties in reverse learning (or strategy shifting) and insensitivity to future consequences. Research suggests that the reported poor performance of addicts is a possible artefact of decision making tasks which encourage poor decisions initially, paired with an impaired ability to switch task strategies as experience and knowledge is gained.

Hypothesis: Can male opiate addicts be prompted (with feedback, punishment or task practice) to switch decision making strategies in a task which initially encourages poor choices, and requires non-myopic behaviour. Sample: 60 males, >1 year heroin addiction, currently receiving stable substitute medication (no opiate use for 2 weeks minimum).

Results: Data collection is underway and will be completed within 3 months. Current trend in collected data suggests that punishment prompts learning of optimum decision making strategies in addicts. Findings will be available by March 2007.

S63.03

Prevalence and assessment of substance misuse in pregnancy in a UK setting

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Prevalence: Substance use in young women (16-24 years old) has increased in the last decade. Twenty-four per cent of young women aged 16-24 are 'heavy drinkers' (defined as more 6 units in a day on at least one day in the previous week). Several studies conducted in the UK in the 1990s on different populations of pregnant women demonstrated nicotine use in about a third of pregnant women, cannabis use in about 11%, opiate use in less than 2% and cocaine use is about 1%. Other studies confirmed that 10.6-15.6% of antenatal women will be using substances other than tobacco in the first trimester and when objective measures on women in labour were reported about 3.5% had evidence of substances other than tobacco. Consequences: It is estimated that at least a quarter of a million children are growing up in homes where one or both parents have drug problems which may expose them to social and environmental hazards in the UK. The National Confidential Enquiry into Maternal Deaths found that the overall leading cause of pregnancy related death is psychiatric disorder, and 8% of all mothers who died were substance users especially young disadvantaged women who were up to 20 times more likely to die than those from advantaged groups. Impact on the fetus: Studies on the impact of substance misuse on the fetal growth remains relatively under-researched. Smoking in pregnancy