was granted to it, under the designation of 'psychosomatic medicine'. The discipline evolved not only in the USA, but also in Australia, New Zealand, Canada, and in several European countries, which have developed C-L-relevant guidelines for training.

In Europe, since the creation of the European C-L Workgroup (ECLW) in 1987, the first Europe-wide C-L network, the discipline as a whole has evolved considerably. Nevertheless, there are still large discrepancies in the training standards across European countries. During postgraduate training, rotation to a C—L service is mandatory or recommended only in a small number of countries. A similar situation is present with respect to national guidelines for training in this psychiatric subspecialty. C-L psychiatry has been officially recognized as a subspecialty only in two European countries. Current C-L training requirements ranging from residency training to subspecialty additional education are presented. The effect that international training guidelines and recommendations (WPA, UEMS, EACLPP) have had on European developments is considered.

We conclude by suggesting possible measures that can be taken to support C-L psychiatry by means of training standards and of implementation of supplementary certification.

CME Course: The management of substance misuse in pregnancy

C11.01

The epidemiology of substance misuse in pregnancy including physical and psychiatric comorbidity

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An understanding of the epidemiology of alcohol and drug use in young women is important to appreciate the considerable morbidity and mortality associated with it and to understand the impact of such use on offspring. Although abstention rates are consistently higher among women than men in general substance misuse is increasing in young women. Differences in definitions, measurement techniques, availability, social acceptability and affordability partly explain the great variability in reported prevalence rates. Alcohol exposure among pregnant women varies from 0.2% to 14.8%. An Australian national survey revealed that nearly half of pregnant and / or breast-feeding women up to 6 months postpartum were using alcohol. A Swedish study reported risky use of alcohol during the first 6 weeks of pregnancy, at 15%. Cannabis use among pregnant women varies from 1.8% to 15%. The reported prevalence of opiate use during pregnancy ranges from 1.65% to 8.5%. Cocaine use among pregnant women is reported to be between 0.3% and 9.5%. Most pregnant women stop or reduce their substance use during pregnancy and this might be an opportune moment for detection and treatment. Substance use tends to increase sharply in the postpartum period with adverse consequences for mother and baby. Perinatal substance misuse interventions can reduce adverse neonatal outcomes. On the basis of the relatively high rate of substance use disorders during pregnancy and postpartum period, effective screening and intervention strategies should be implemented.

C11.02

Treatment of alcohol problems in pregnancy and prevention of fetal alcohol syndrome

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Antenatal alcohol use is the leading preventable cause of birth defects, growth restriction and neurodevelopmental disorders, yet half of all pregnant women report drinking during pregnancy FAS and alcohol-related birth defects combined are estimated to be 10 per 1000 births or 1% of all births in some studies. The main objectives are a safe pregnancy with a healthy baby and mother. - the welfare of the unborn child and the mother is paramount. Promotion of engagement with substance misuse treatment and antenatal care within a co-ordinated multidisciplinary team is key. This session will cover the use of assessment, psychological and pharmacological interventions.

The use of assessment instruments (T-ACE, AUDIT and TWEAK) and biomarkers will be discussed. Brief interventions have been recommended as the first step in approaching people with mild-to-moderate alcohol problems. Since here is no research data available specifically on the impact of and pharmacological treatments for stabilisation, detoxification, reduction, maintenance and relapse prevention during pregnancy, good practice will be outlined. This includes psychological support and the psychosocial context. These complex clinical decisions depend on degree of dependence, polysubstance misuse, social stability and support network, and stage of pregnancy and must be individualised to the patient's needs. Some appreciation as to how to weigh the benefits against the potential risks with no obvious medical or social contraindication to the therapies will be discussed.

C11.03

Management of illicit drug misuse and maternal and child outcomes

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The treatment of pregnant women suffering from a disorder of misuse or dependence to illicit drugs (opiates, cannabinoids, psychostimulants, benzodiazepines) means an interdisciplinary challenge with a high responsibility.

Because of the specific characteristic of these women to play things down often the pregnancy is diagnosed very late. In addition the misuse of these substances is usually accompanied by severe smoking and drinking of alcohol. Therefore the toxic harmful consequences for mother and especially for the fetus, neonate or child are often difficult to differentiate from those of heavy smoking and of drinking alcohol.

Based on these facts, data describing the effects of the different illicit drugs on congenital complications and on the status of the fetus, neonate or child will be presented as well as different treatment procedures during pregnany. The indication or contraindication of withdrawal treatments of the different illicit drugs during pregnany will be presented. Special consideration of opioid maintenance treatment of pregnant women will be given.The value of treatment interventions within a multidisciplinary (social, psychological, pharmacological, obstetrics specialists, addiction psychiatry) package of care will be discussed. Depending on the available time an example of an interview with a pregnant woman who is dependent on illegal drugs will be given.

Symposium: Genomic imaging in schizophrenia

S39.01

Macroscopic probes of brain dysmaturation in (developmental) pathopsychology

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Background: The complex sulco-gyral pattern results from fetal and early childhood processes that shape the cortex anatomy from a smooth lissencephalic structure to a highly convoluted surface. Abnormal brain maturation has been suggested as risk factor for schizophrenia. Thus, measures of the cortical folding pattern could provide cues for the neurodevelopmental aspects of pathopsychology.

Method: Brain morphometry softwares providing 3D sulci descriptors (e.g. surface) from MRI (Mangin, 2004 ; Cachia, 2007). This automated method avoids biases inherent to image normalisation and partial volume effect. Therefore, statistics on sulcal measurements should generalize across patients. T1 MRI datasets were studied in at-risk subjects, adolescent onset schizophrenia, and patients with treatment-resistant depression and auditory hallucinations.

Results: Decreased in sulci surface were detected in whole brain sulcal indices and in regional sulcal indices. Decreases in global sulcal indices were detected in most patient groups, except in at risk subjects. Decreases in local sulcal indices were detected in langage-related areas in resistant hallucinators (Cachia 2007), and confined to left temporal regions in adolescent schizophrenia (Pentilla, submitted). In patients with treatment-resistant depression, sulci descriptors differed in right hemisphere sulci adjacent to limbic regions (Pentilla, submitted).

Conclusion: The potential of the gyrification pattern for the inference of neuroimage-based developmental biomarkers will be further examined using multivariate classification approaches (Duchesnay 2006).

Reference

[1]. Mangin et al., Neuroimage 2004 - Cachia et al., Neuroimage 2007 – Duchesnay et al., Neuroimage 2006

S39.02

Imaging genetics in the Edinburgh high risk study

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Background: We have recently completed a ten year longitudinal study of brain structure and function in a group of individuals at high risk of schizophrenia for familial reasons, and have taken blood for genetic analyses. We can therefore study the effects of recently discovered candidate genes for schizophrenia in a large well characterised cohort of those at risk, including some who went on to become ill, but without illness related potential confounders such as antipsychotic medication.

Methods: 162 initially healthy people aged 15-25 at high genetic risk of schizophrenia, because they had at least one close relative with the disorder, were recruited and examined with structural MRI and functional MRI. The development of psychotic symptoms and/or schizophrenia itself was monitored at serial assessments, which most participants had at 18-24 month intervals over up to 10 years.

Results: 21 developed schizophrenia during the study and an additional 66 subjects had psychotic symptoms at one or more assessments. 78 of the subjects were genotyped. Single nucleotide polymorphisms in the Brain Derived Neurotrophic Factor (BNDF) and D-amino acid oxidase (DAO) genes were associated with abnormalities of frontal and temporal function in the high risk cohort as a whole. A risk allele (SNP8NRG243177) in the Neuregulin 1 (NRG1) promoter region, on the other hand, was associated with psychotic symptoms, decreased premorbid IQ and decreased activation of pre-frontal and temporal lobe regions. The Val(158)Met polymorphism in the Catechol-O-MethylTransferase (COMT) gene predicted schizophrenia in this cohort in a dose-dependent manner. It was also associated with reduced gray matter density and BOLD signal in anterior cingulate cortex.

Conclusions: These patterns of altered brain structure and function have previously been associated with schizophrenia in this and other samples. In the Scottish population, BDNF and DAO may have trait effects, while the NRG1 variant appears to be a risk factor for an extended or intermediate phenotype and the COMT Val allele is associated with an increased risk of schizophrenia. This genetic background may provide a mechanistic framework in which to study the effects of environmental risk factors, perhaps particularly in subjects at increased familial risk.

S39.03

Candidate genes and brain cortical morphology in schizophrenia

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Aim: To investigate associations between schizophrenia candidate gene polymorphisms and regional cortical thickness and volume in patients with schizophrenia and healthy control subjects.

Methods: Genotyping was performed using PCR and pyrosequencing techniques. Cortical morphology was analyzed by processing magnetic resonance brain images with the FreeSurfer software package. General linear model analysis was used to study associations between gene variants and cortical thickness in patients and controls, respectively. Regional cortical volumes were defined from automatic cortical parcellations. Our first studies from 96 patients with schizophrenia and 104 healthy control subjects demonstrate that polymorphisms in the brain derived neurotrophic factor (BDNF) gene may be associated with variation in frontal lobe morphology. Associations seem to be stronger in patients with schizophrenia than in healthy controls.

Symposium: Psychotherapy of chronic depression — different approaches, equal efficacy?

S45.01

Interpersonal psychotherapy - New results in chronic depression

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