

volumes were acquired with a 1.0 T Siemens Harmony Expert scanner. Imaging data were preprocessed and voxel based morphometry was performed by SPM2. Optimized VBM method was used.

**Results:** Similar to earlier studies, patients with schizophrenia showed decreased gray matter tissue density in frontotemporal and insular regions bilaterally. Moreover, the left-sided parietal operculum and the calcarina showed focal decrease in tissue density. Frontotemporal and insular white matter density decrease were detected bilaterally similar to gray matter changes. The left sided precuneus and lingual gyrus were also involved in reduced white matter density. Increased cerebrospinal fluid spaces were detected in the frontal regions and the ventricles.

**Conclusions:** We detected structural brain abnormalities in the early course of schizophrenia. Our results with the optimized voxel-based morphometry are in line with earlier imaging studies and correspond with neuropsychologically detectable frontotemporal deficits in schizophrenia.

### P0135

D-serine serum level - a marker of glutamatergic dysfunction in schizophrenia

J. Hons<sup>1</sup>, R. Zirko<sup>1</sup>, J. Bazant<sup>1</sup>, J. Libiger<sup>1</sup>, M. Ulrychova<sup>2</sup>, J. Vavrova<sup>2</sup>, E. Cermakova<sup>3</sup>. <sup>1</sup>Department of Psychiatry, University Hospital Hradec Kralove and Charles University in Prague, Faculty of Medicine, Hradec Kralove, Czech Republic <sup>2</sup>Institute of Clinical Biochemistry and Diagnostics, University Hospital, Hradec Kralove, Czech Republic <sup>3</sup>Department of Medical Biophysics, Charles University in Prague, Faculty of Medicine, Hradec Kralove, Czech Republic

**Background:** D-serine acts as an endogenous co-agonist at the glycine modulatory site of the NMDA receptor. Significantly decreased D-serine serum levels were reported in patients with schizophrenia in comparison to healthy control subjects. D-serine improved positive and negative symptoms in patients with schizophrenia treated with antipsychotics. We hypothesized that D-serine serum level might be associated with specific characteristics of psychopathology in schizophrenia.

**Methods:** We enrolled fifty patients with schizophrenia into the study. Positive and Negative Syndrom Scale (PANSS) and The Scale for the Assessment of Negative Symptoms (SANS) were used to assess the symptoms of schizophrenia. D-serine serum levels were measured by High Performance Liquid Chromatography.

**Results:** D-serine serum levels were not associated with PANSS and SANS total and subscales scores in the population of fifty patients. We demonstrated only mild insignificant linear association of PANSS score with D-serine serum level ( $r=0.20$ ) in the group of men ( $n=33$ ). The mild insignificant inverse correlation was found in the group of women ( $n=17$ ) between the total PANSS ( $r=-0.35$ ) or SANS score ( $r=-0.30$ ) and D-serine serum level.

**Conclusion:** We assumed that various biochemical and clinical profiles could lead to identification of specific subtypes of schizophrenia. However, we did not find any significant association between serum D-serine and clinical symptoms in this study. D-serine serum levels had a strong trend to be lower among female patients with schizophrenia as compared to men. The role of gender in the glutamatergic dysfunction associated with schizophrenia deserves further attention.

### P0136

Psychose puerperale : Nouveaux concepts, nouvelles évolutions

H.I. Penka. Centre Hospitalier Henri Ey, Le Coudray, France

Les manifestations bruyantes de la psychose puerpérale, qui peut éclore non seulement dans le service de maternité, mais quelques semaines après l'accouchement, peuvent être masquées par un tableau de dérèglements affectifs mixtes avec des éléments confusionnels.

A partir de cette situation et surtout quand il s'agit d'un premier épisode, il est difficile de faire la part des choses entre un tableau clinique de dépression sévère de post-partum, psychose puerpérale sans manifestations spectaculaires ou pourquoi pas d'un baby blues prolongé et atypique. La notion des limites diagnostiques dans le domaine reste assez floue.

C'est pourquoi la problématique de repérage diagnostique précis des psychoses puerpérales reste de toute actualité.

Les conséquences de la sous-évaluation d'un premier épisode psychotique apparu en lien avec l'accouchement se situent au niveau d'un retard de la prise en charge de la patiente qui porte ces dérives possibles et pour la mère et pour le bébé, et pour l'entourage (père, fratrie, famille, entourage social).

Nous allons illustrer ces réflexions par quelques exemples. Dans un premier temps, nous allons proposer une description de l'évolution de la psychose puerpérale vers un trouble bipolaire chez l'héroïne principale d'un roman contemporain, Sylvie (Christine ANGOT, Les désaxés, éd. Stock, 2004).

Dans un deuxième temps, nous allons nous arrêter sur trois situations cliniques qui montrent plusieurs facettes de la modalité d'évolution de la surprenante et inattendue psychose puerpérale.

### P0137

A double-blind randomized placebo-controlled study of relapse predictors in remitted first-episode psychosis patients

L.M. Hui<sup>1</sup>, Y.H. Chen<sup>1</sup>, M. Lam<sup>3</sup>, C.W. Law<sup>2</sup>, P.Y. Chiu<sup>2</sup>, W.S. Chung<sup>3</sup>, S. Tso<sup>5</sup>, P.F. Pang<sup>3</sup>, K.T. Chan<sup>5</sup>, F. Mo<sup>3</sup>, P.M. Chan<sup>4</sup>, S.F. Hung<sup>4</sup>, W.G. Honer<sup>6</sup>. <sup>1</sup>Department of Psychiatry, University of Hong Kong, Hong Kong, Hong Kong <sup>2</sup>Department of Psychiatry, Queen Mary Hospital, Hong Kong, Hong Kong <sup>3</sup>Department of Psychiatry, Tai PO Hospital, Hong Kong, Hong Kong <sup>4</sup>Department of Psychiatry, Kwai Chung Hospital, Hong Kong, Hong Kong <sup>5</sup>Department of Psychiatry, Castle Peak Hospital, Hong Kong, Hong Kong <sup>6</sup>Department of Psychiatry, University of British Columbia, Vancouver, BC, Canada

**Background:** Medication discontinuation in remitted single episode patients after a period of maintenance therapy is a major clinical decision and thus the identification of risk factors controlling for medication status is important.

**Methods:** Following a first/single episode with DSM-IV schizophrenia and related psychoses, remitted patients who had remained well on maintenance medication for at least one year were randomized to receive either maintenance therapy (with quetiapine 400 mg/day), or placebo for 12 months.

**Results:** 178 patients were randomized. Relapse rates were 33.7% (30/89) in maintenance group and 66.3% (59/89) in placebo group. Potential predictors were initially identified in univariate Cox regression models ( $p<0.1$ ) and were subsequently entered into a multivariate Cox regression model for measuring the relapse risk. Significant

predictors included patients on placebo (hazard ratio, 0.41; CI, 0.25 – 0.68;  $p=0.001$ ); having more pre-morbid schizotypal traits (hazard ratio, 2.32; CI, 1.33 – 4.04;  $p=0.003$ ); scoring lower in the logical memory test (hazard ratio, 0.94; CI, 0.9 – 0.99;  $p=0.028$ ); and having more soft neurological signs (disinhibition) (hazard ratio, 1.33; CI, 1.02 – 1.74;  $p=0.039$ ).

**Conclusions:** Relapse predictors may help to inform clinical decisions about discontinuation of maintenance therapy specifically for patients with a first/single episode psychosis following at least one year of maintenance therapy.

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### P0138

Evaluating decision criteria for the choice of pharmacological long-term therapy in risperidone treated patients with schizophrenia

B. Ibach, M. Gerwe, L. Hargarter. *Medical & Scientific Affairs, Janssen-Cilag, Neuss, Germany*

**Objectives:** To evaluate decision criteria for initiation of pharmacological long-term treatment (LTT) in patients with schizophrenia

**Methods:** Non-interventional trial in in-patients pretreated with oral risperidone (RIS-SCH-0001). Further treatment strategy was detailed to: monotherapy with (1) long-acting injectable risperidone (LAIR), (2) oral risperidone (oral RIS), (3) no decision taken, (4) other antipsychotics. Study period was limited to 42 days.

**Results:** Decision groups comprised (1) 29.0%, (2) 43.0%, (4) 11.5% and (3)16.5% of the 321 patients who were included (mean age 40.5y). Reasons for taking the decision for LTT included good efficacy of oral RIS (LAIR 17.2%, oral RIS 41.3%, other decision 2.7%) and previous lack of compliance (LAIR 40.7%, oral RIS 2.2%, other decision 16.2%). Mean observation period was shorter in groups 1/2 compared to groups 3/4. For patients known at the institution odds ratio for being treated with LAIR was 2.8 as opposed to oral RIS. 130 AEs were reported (47 patients), 1 SAE (somnolence) classified as of possible causality to RIS.

**Conclusion:** The trial revealed heterogeneous reasons for decision taking into LTT in patients with schizophrenia. LAIR but also other depot formulations have been the favored choice in case of lack of compliance. Patients known at the institution were more likely to be treated with LAIR.

### P0139

Modalities of violence in schizophrenia

P. Ittah, R. Gaillard, R. Gourevitch, F.J. Bayle. *Sainte Anne Hospital, Paris, France*

**Aims:** According to a recent large-scale Swedish epidemiological study, 5 % of violent crimes are attributable to patients suffering from psychosis. We present the preliminary results of a feasibility study comparing violent and non-violent schizophrenics on underlying potential process such as impulsivity, emotionality using both, psychometrics and neuropsychological correlates.

**Methods:** Male Violents subjects were selected by clinicians on their life time histories of violence and control were paired according to age. Assessment include selected neuropsychological and psychometrics tests: BPRS (Brief Psychiatric Rating Scale), PCL-R

(Psychopathy Checklist-Revised), BREF (Frontal Assessment Battery), WCST (Wisconsin Card Sorting Test), Iowa Gambling Task, BIS-11 (Impulsivity Scale).

**Results:** Violent's performed better in the executive functions (WCST and the BREF), showing a better use of the dorso-side prefrontal cerebral cortex.

Their less good performances in the orbitofrontal functions, (Iowa Gambling Task, BREF), show cortical abnormalities involved in the processes of decision. Lesser capacity to recognize the appropriate feelings seems more present in deliberate violence, determined by the emotional coolness and the absence of fault, than in impulsive violence.

The PCL-R identifies the defect of orbitofrontal activation as the origin of the perturbed emotional integration and the bigger impulsiveness, by the slightest capacity of inhibition of the impulsive decisions.

**Conclusion:** Our results, especially when compared to literature data, show the existence of dysfunctional cerebral process in schizophrenic violent patients similar to those observed in psychopathy. They outline the need for further clinical and neuropsychological studies to identify pathophysiological processes and estimate the potential recurrence of such behaviours.

### P0140

Cognitive improvement in schizophrenia after 6-month treatment with olanzapine

K. Krysta<sup>1</sup>, A. Klasik<sup>2</sup>, I. Krupka-Matuszczyk<sup>1</sup>, J. Przybylo<sup>1</sup>, M. Janas-Kozik<sup>1</sup>, M. Sygut<sup>1</sup>. <sup>1</sup>Department of Psychiatry and Psychotherapy, Medical University of Silesia, Katowice, Poland <sup>2</sup>Department of Neuropsychology, University of Opole, Opole, Poland

**Background:** Positive effect of olanzapine on cognitive functions in schizophrenia was confirmed in many papers accessible in the literature.

**Objective:** The objective of our study is to evaluate the effect of olanzapine treatment on cognitive functions in patients suffering from schizophrenia during a six-month observation.

**Methods:** Twenty patients with a diagnosis of schizophrenia according to ICD-10 diagnostic criteria for research were examined. 1 day before initiation of olanzapine a baseline assessment was performed. The neuropsychological examination was repeated 28 days, 60 days, 3 months, and 6 months after the beginning of treatment. The use of benzodiazepines was interrupted 48 hours before each assessment, and a continuous co-medication with benzodiazepines never lasted longer than 48 hours. No other additional medication was administered. Cognitron (COG) and Vienna Reaction Test (RT), both tests being a part of Vienna TEST System, were used. The Positive and Negative Symptom Scale (PANSS) was also used to evaluate general nonpsychotic psychiatric symptoms, positive psychotic symptoms, and negative symptoms. The assessment with the use of PANSS took place on the same days as the neuropsychological examination.

**Results:** We have shown with the use of neurocognitive battery, that patients treated with olanzapine improved during the treatment. It is notable that this improvement was observed already on the 28th day of the treatment.

**Conclusion:** The above data here may be useful in encouraging clinicians to use olanzapine across the broad range of schizophrenic patients.