

## EPP0521

**Overnight affective dynamics and sleep characteristics as predictors of depression and its development**

O. Minaeva\*, S. George, A. Kuranova, M. Wichers, H. Riese and S. Boonj

Department Of Psychiatry, University of Groningen, University Medical Center Groningen, Groningen, Netherlands

\*Corresponding author.

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**Introduction:** Greater affective inertia during the day (higher carry-over effects of prior affect to the current moment) is associated with depression and its development. However, the role of overnight affective inertia (from evening to morning) in depression, and the role of sleep therein, has been scarcely studied.

**Objectives:** We examined i) the difference in overnight inertia for positive (PA) and negative affect (NA) between individuals with past depression, current depression, and no depression; ii) how sleep duration and quality influence overnight affective inertia in these groups, and iii) whether overnight affective inertia predicts depression development.

**Methods:** We used data of 579 women from the East-Flanders Prospective Twin Survey. First, individuals with past (n=82), current (n=26), and no depression (n=471) at baseline were examined, and then individuals who did (n=58) and did not (n=319) develop depression at 12-months follow-up. Affect was assessed 10 times a day for 5 days. Sleep was assessed with sleep diaries. Affective inertia was operationalized as the influence of  $affect_{t-1}$  on  $affect_t$ . Linear mixed-effect models were used to test the hypotheses.

**Results:** Overnight affective inertia was not associated with depression, neither was it differently associated with sleep characteristics in the depression groups. However, sleep characteristics were more negatively associated with morning NA in both depression groups compared to the non-depressed group. Overnight affective inertia did not predict the development of depression at follow-up.

**Conclusions:** Depression and sleep characteristics might be more related to mean affect levels rather than to more complex emotion dynamics measures. Replication of these findings with longer time-series is needed.

**Keywords:** Affective inertia; Depression; sleep; Experience Sampling Method

## EPP0520

**Study of cognitive impairment in depression**

R. Sharma<sup>1\*</sup>, J. Khattry<sup>2</sup> and P. Thapa<sup>2</sup>

<sup>1</sup>Psychiatry, National medical college, kathmandu, Nepal and

<sup>2</sup>Psychiatry, Manipal College of Medical Sciences, Pokhara, Nepal

\*Corresponding author.

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**Introduction:** Cognitive impairment is frequently observed in patients suffering from depression. Cognitive dysfunction play a critical role in increasing the individual's vulnerability for the first onset, maintenance and future recurrence of depressive episodes.

**Objectives:** The objective was to assess the cognitive impairment in patient with depressive episode.

**Methods:** A cross sectional, hospital based study was conducted among 100 patients with depressive episodes diagnosed by

International Classification of Diseases - 10 visiting outpatient and inpatient in Department of Psychiatry of Manipal Teaching Hospital, Pokhara, Nepal. The subjects were interviewed with Beck's depression inventory, Perceived deficient questionnaire, Frontal assessment battery, Trail making test A and B and Forward and Backward Digit Span test. For the assessment of correlates, regression analyses were done using SPSS v 20.0.

**Results:** The mean age of the participants was 32.47 years ( $SD \pm 12.25$ ), majority were female, married, Hindu and from urban population. Higher number of respondent were student. Most of them were educated till intermediate level and belonged to middle socioeconomic class family. Different domain of cognitive function according to severity of depression was found to be statistically significant ( $p < 0.05$ ). This study also found that age, sex, education, medication use and Becks depression inventory score predicted the cognitive function.

**Conclusions:** Cognitive impairment is not uncommon among patient with depressive episodes. The impairment is not only seen in severe cases but also in mild to moderate cases. The assessment of cognitive deficits should be the regular part of the assessment in depressive patients.

**Keywords:** Depression; cognitive functions

## EPP0521

**Inaugural seizure in a patient submitted to electroconvulsive therapy and anti-psychotic treatment: Who's the culprit?**

I. Figueiredo<sup>1</sup>, A.C. Rodrigues<sup>2\*</sup>, I. Pereira<sup>3</sup>, C. Oliveira<sup>1</sup> and A. Bento<sup>1</sup>

<sup>1</sup>Clínica 3, Centro Hospitalar Psiquiátrico de Lisboa, Lisboa, Portugal;

<sup>2</sup>Unidade De Reabilitação, Centro Hospitalar Psiquiátrico de Lisboa, Lisboa, Portugal and <sup>3</sup>Clínica 4 - Unidade De Alcoologia E Novas Dependências, Centro Hospitalar Psiquiátrico de Lisboa, Lisboa, Portugal

\*Corresponding author.

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**Introduction:** Electroconvulsive Therapy (ECT) is one of the most effective treatments for Depressive Disorder. Although its safety and tolerability have been throughout the years, it still holds common mild and rarely persistent side effects.

**Objectives:** The aim is to review some of the most recent data on the connection between inaugural seizures in psychiatric patients being submitted to ECT for treatment of Major Depressive Disorder, while also discussing the possible contribution of the concomitant use of clozapine and clomipramine.

**Methods:** The authors present a case report of an episode of an inaugural seizure in a patient submitted to ECT, with concomitant use of clozapine and clomipramine. A search on Pubmed and Clinicalkey was performed, from which the relevant publications were selected and reviewed.

**Results:** The authors present a 62 year old woman who developed an inaugural generalized tonic-clonic seizure after being submitted to ECT for treatment of Recurrent Major Depressive Disorder (RMDD), while also carrying out clozapine and clomipramine dosage reduction, with the purpose of discontinuation. The patient had no history of previous seizures, nor were there relevant findings in the patient's neurological examination, blood work, brain CT or EEG.

**Conclusions:** There is a plethora of possible factors involved in the development of an inaugural seizure. Although, the risk of spontaneous seizure during ECT is low, it may be increased by the concomitant use of drugs which can lower the seizure threshold. In most cases, when ECT was resumed after removal of such triggers, there were no further complications.

**Keywords:** Epileptic seizure; ECT; major depressive disorder

## EPP0522

### Peripheral tryptophan and serotonin and kynurenine pathways in major depression: A case-control study

R. Colle<sup>1\*</sup>, C. Verstuyft<sup>1</sup>, D. David<sup>1</sup>, P. Chanson<sup>2</sup> and E. Corruble<sup>1</sup>

<sup>1</sup>Moods Team, INSERM UMR-1178, Le Kremlin-Bicêtre, France and

<sup>2</sup>Endocrinology, INSERM 1185, Le Kremlin-Bicêtre, France

\*Corresponding author.

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**Introduction:** The tryptophan pathway along with its two branches of metabolism to serotonin and kynurenine seems to be affected in major depression. In depressed patients, peripheral levels of tryptophan, serotonin, kynurenine and their metabolite remain unclear.

**Objectives:** Therefore, peripheral tryptophan and metabolites of serotonin and kynurenine were investigated extensively in 173 patients suffering from a current major depressive episode (MDE) and compared to 214 healthy controls (HC).

**Methods:** Fasting plasma levels of 11 peripheral metabolites were quantified: tryptophan, serotonin pathway (serotonin, its precursor 5-hydroxy-tryptophan and its metabolite the 5-hydroxy-indole acetic acid), and kynurenine pathway (kynurenine and six of its metabolites including anthranilic acid, kynurenic acid, nicotinamide, picolinic acid, xanthurenic acid and 3-hydroxy-anthranilic acid).

**Results:** 60 (34.7%) patients were antidepressant drug free. Tryptophan levels did not differ between MDE patients and HC. Serotonin and its precursor (5-hydroxy-tryptophan) levels were lower in MDE patients than HC. Whereas, its metabolite (5-hydroxy-indole acetic acid) levels were within the standard range. Kynurenine and four of its metabolites (kynurenic acid, nicotinamide, picolinic acid and xanthurenic acid) were lower in MDE patients.

**Conclusions:** This study uses the largest ever sample of MDE patients, with an extensive assessment of peripheral tryptophan metabolism in plasma. These findings provide new insights into the peripheral signature of MDE. The reasons for these changes should be further investigated. These results might suggest a better stratification of patients and different therapeutic strategies therapeutic strategies.

**Keywords:** Major Depression; Peripheral serotonin pathway; Peripheral kynurenine pathway; Peripheral tryptophan

## EPP0523

### On psychosocial pathomorphosis of depression

V. Krasnov and N. Semenova\*

Psychiatry, Moscow Research Institute of Psychiatry – a branch of V. Serbsky National Medical Research Centre for Psychiatry and Narcology, Moscow, Russia, Moscow, Russian Federation

\*Corresponding author.

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**Introduction:** The concept of depression has long been a matter of controversy. Sociocultural factors greatly influence the phenomenology of depression and the meaning that patients assign to their symptoms.

**Objectives:** The aim is to determine the changes in the phenomenology of depression over the past decades.

**Methods:** To compare the proportions of biologically mediated symptoms of typical recurrent melancholic depression with the ideator components of the depressive syndrome and a depressive decrease in reactivity. We compared the archival data of one of the authors (V.N.K.) obtained in the study of depression: 1980-1987 (first group) and 2014-2020 (second group). The groups are age-comparable (21-64 y.o.). The Hamilton Depression Scale has been used to assess depression (score of 21-32, in both groups).

**Results:** Basic, i.e., biologically mediated symptoms, were not statistically different in the study groups. Whereas symptoms associated with emotional reactivity, the patient's introspective abilities and capacity to identify and verbalize feelings - in the second group, were statistically rare, except for anhedonia, which, on the contrary, came to the fore. Based on some longitudinal studies of the dangers of excessive reliance on computer-mediated communication, one could foresee such contrasting phenomenology changes, which were especially clearly manifested in young patients.

**Conclusions:** Over the past decades, there are changes in the phenomenology of depression. The same underlying disorder can produce different clinical presentations, and agreement on a pathological entity does not necessarily mean deal with a descriptive label.

**Keywords:** Depression; Psychosocial pathomorphosis; Patient's capacity to verbalize feelings

## EPP0524

### The impact of religiousness on life satisfaction and anxiety level of the patients with depression disorders treated at the neuro-psychiatric center in riem, munich

E.D. Cindik Herbrüggen\* and B. Akdag

Psychosomatik/psychotherapie, Neuro-Psychiatric Center Riem (Neuro-Psychiatrisches Zentrum Riem), München, Germany

\*Corresponding author.

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**Introduction:** Religious people suffer less from depression disorder than less or non-religious people. According to a longitudinal study investigating religiousness and negative life events, religious participants demonstrated fewer depressive symptoms than non-religious. Furthermore, depressed patients with higher religiosity scores show lower values of depression symptoms.

**Objectives:** The purpose of the study was to investigate the relationship between religiosity and patients with depression symptoms in the Neuro-Psychiatric Center in Riem (NPZR). The correlation between religiousness and life satisfaction as well as anxiety level was analyzed. Additionally, possible gender differences are also assessed.

**Methods:** The patients of the NPZR were selected as sample of the study (N = 106, F = 61, M = 45). The participants were provided with three surveys including the life satisfaction questionnaire, state trait anxiety inventory and the Centrality Scale. A Pearson Correlation was conducted to investigate the association between life satisfaction, level of anxiety and religiousness. T-Test was carried out to find out the differences between female and male patients.