



Available online at
ScienceDirect
www.sciencedirect.com

Elsevier Masson France
EM|consulte
www.em-consulte.com/en



25th European Congress of Psychiatry ePoster viewing part 3

e-Poster Viewing: Depression

EV0360

Global arginine bioavailability ratio is decreased in patients with major depressive disorder

T. Ali-Sisto¹, T. Tolmunen^{1,2}, H. Viinamäki^{1,2}, P. Mäntyselkä^{3,4}, V. Velagapudi⁵, L. Soili^{1,2,*}

¹ University of Eastern Finland, Institute of Clinical Medicine, Kuopio, Finland

² Kuopio University Hospital, Department of psychiatry, Kuopio, Finland

³ University of Eastern Finland, Primary Health Care Unit, Kuopio, Finland

⁴ Kuopio University Hospital, Primary Health Care Unit, Kuopio, Finland

⁵ Institute for Molecular Medicine Finland, Metabolomics unit, Helsinki, Finland

* Corresponding author.

Introduction The global arginine bioavailability ratio (GABR) is used to estimate arginine supply. Arginine is precursor to nitric oxide (NO) that has been suggested to play a role in major depressive disorder (MDD). NO also participates in neuronal, inflammatory and cardioprotective functions.

Objectives To compare GABR between:

- D patients and non-depressed controls;
- remitted and non-remitted MDD patients;
- baseline and follow-up within remitted and non-remitted MDD groups.

Aims To investigate the role of NO production in MDD.

Methods The sample comprised 99 MDD patients and 253 non-depressed controls (Beck Depression Inventory scores < 10) aged 20–71 years. Altogether, 78 patients returned for the follow-up; 33 were remitted and 45 non-remitted. GABR was calculated from serum levels of arginine, citrulline and ornithine, which were analysed using ultra-performance liquid chromatography. Differences between the study groups were examined using logistic regression adjusted for age, gender, smoking, alcohol use, physical exercise and glycated haemoglobin. The follow-up regression analyses were adjusted for age, gender and physical exercise.

Results Lowered GABR was associated with belonging to the MDD group (OR 0.13, 95% CI 0.03–0.50). Exclusion of participants using anti-depressants that were associated with measured

metabolites did not change the results. Over the follow-up period, the remitted and non-remitted groups both showed an increase in GABR ($Z = -.53$, $P < 0.001$ and $Z = -3.00$, $P = 0.003$, respectively).

Conclusions Decreased GABR may characterise MDD. This could affect neuronal, immunological and cardioprotective functions of NO.

Disclosure of interest The authors have not supplied their declaration of competing interest.

<http://dx.doi.org/10.1016/j.eurpsy.2017.01.690>

EV0361

Depression and multiple sclerosis–pathophysiological links: From biology to treatment

S.L. Azevedo Pinto*, R. Coelho, A. Silva

Hospital de S. João, Clínica de Psiquiatria e Saúde Mental, Porto, Portugal

* Corresponding author.

Introduction Depressive disorders (DD) are the second cause of disability worldwide. DD affect predominantly working age individuals, recurring in 75% of cases. DD pathophysiology is intricate and multi-factorial. Several inflammatory diseases have been linked to mood disorders. Amongst these conditions is multiple sclerosis (MS), a chronic inflammatory disease of the central nervous system, characterized by frequent exacerbations and progressive functional loss.

Objective To review the current knowledge on DD and MS as comorbidities and the underlying pathophysiological mechanisms.

Methods We performed a bibliographic search in PubMed–publications released in the last 5 years, written in English, Portuguese and Spanish, containing the keywords depression, inflammatory disorders, multiple sclerosis.

Results The inflammatory hypothesis of depression provides a strong foundation to explain its close link with multiple sclerosis. The incidence and prevalence of DD is significantly higher in MS, especially in men. Functional imaging studies have shown that depressive symptoms are closely linked to the extension of inflammatory lesions, especially on the frontal and parietal regions, with particular emphasis to those affecting the grey matter. On the one hand, the clinical course and response to treatment of MS may be hindered by DD; on the other hand, the evolution of MS lesions leads to fluctuations in mood, with significant improvement of DD with successful MS treatment, independently of physical improvement.

0924-9338/

Conclusions There appears to be a biological link between DD and MS, with a bidirectional interference in the clinical course, prognosis and treatment response. Thus, both conditions must be correctly identified and treated.

Disclosure of interest The authors have not supplied their declaration of competing interest.

<http://dx.doi.org/10.1016/j.eurpsy.2017.01.691>

EV0362

Correlation between depression and happiness among Kuwait university students

G. Baqer

Kuwait University, Department of Psychology, Faculty of Social Sciences, Kaifan, Kuwait

Background The Beck Depression Inventory (BDI-II) has become one of the most widely used instruments for evaluating the severity of depressive symptoms in psychiatric patients and in normal populations. The Oxford Happiness Questionnaire (OHQ) has been derived from the Oxford Happiness Inventory (OHI). The OHI follows the design and format of BDI-II, which provided, when reversed, a set of 20 multiple-choice items relevant to subjective well being. Further items were added to cover aspects of happiness and 29 items were retained in the final scale. OHQ was translated into Arabic for the first time in the present study. The aim of the study is to examine the correlation between depression and happiness.

Materials and methods BDI-II (alpha .87) and the Arabic version of OHQ (alpha .92) were completed by a sample of (380) Kuwait university students (180) males and (200) females with mean age of 22.19 ± 2.8 years old. Pearson correlations were calculated.

Results Significant ($P > 0.01$) reverse correlation was found between depression and happiness ($r = -0.54$).

Conclusion Although significant negative relationship existed between BDI-II and OHQ, the coefficient for determination of this correlation shows that nearly only half of depression changes are described and assessed with happiness score! It seems that the two psychometric tools do not completely stand against each other. However, further evaluation of this relationship is needed.

Disclosure of interest The author has not supplied his/her declaration of competing interest.

<http://dx.doi.org/10.1016/j.eurpsy.2017.01.692>

EV0363

Alternating intravenous racemic ketamine and electroconvulsive therapy in treatment resistant depression: A case report

L. Bartova*, A. Weidenauer, M. Dold, A. Naderi-Heiden, S. Kasper, M. Willeit, N. Praschak-Rieder

Medical University of Vienna, Department of Psychiatry and Psychotherapy, Vienna, Austria

* Corresponding author.

Introduction Treatment resistant depression (TRD) affecting approximately 10–30% of all depressed patients often remains misdiagnosed and undertreated, leading to a higher risk of relapse and suicide. Electroconvulsive therapy (ECT) and sub-anesthetic ketamine have repeatedly shown to be effective in the TRD population. Administering ketamine as an anesthetic component to augment antidepressant efficacy of ECT has been proven inconclusive, while a combination of alternating ECT and ketamine has not been investigated yet.

Case report We present a severely depressed and chronically suicidal female inpatient who failed multiple antidepressant treatment attempts, requiring frequent psychiatric admissions. Since

available conventional as well as non-conventional antidepressant treatment strategies were nearly exhausted, we employed a combination of ECT (bilateral stimulation up to 150%) 2–3 times/week, while intravenous racemic ketamine (up to 75 mg per infusion) was administered on ECT free days 2–3 times/week. Consequently, robust anti-suicidal and antidepressant effects could be observed already during the first treatment week. The temporarily occurring subjective forgetfulness disappeared after the last ECT. Summarizing, we employed 9 ECT treatments and 7 ketamine infusions leading to a stable psychopathological state even after discharge from psychiatric inpatient care. In order to prevent relapse a maintenance-therapy comprising ECT once monthly and 2 ketamine infusions (up to 100 mg per infusion) administered on the day before and after ECT was established.

Conclusions In our patient alternating ECT and intravenous racemic ketamine were proven safe and long-term effective after numerous failed antidepressant trials including ECT and ketamine alone. We may hence encourage clinicians to widen their therapeutic armamentarium in severe TRD.

Disclosure of interest The authors have not supplied their declaration of competing interest.

<http://dx.doi.org/10.1016/j.eurpsy.2017.01.693>

EV0364

Relationship between pain-coping strategies, catastrophizing to pain and severity of depression

B. Batinic^{1,*}, J. Nesvanulica², I. Stankovic²

¹ Clinic for Psychiatry Clinical Centre of Serbia, Faculty of Philosophy Department of Psychology, Belgrade, Serbia

² Faculty of Philosophy, Department of Psychology, Belgrade, Serbia

* Corresponding author.

Introduction Studies have shown that somatic pain influences the severity of major depressive disorder (MDD), and could be moderated through pain coping strategies and not catastrophizing to pain.

Objectives The aim of the study was to ascertain the correlation between pain coping strategies, catastrophizing to pain and severity of depression.

Methods The study sample consisted of 82 patients diagnosed with MDD, aged between 18 and 65 years old ($M = 46.21$). Assessment instruments included The Beck Depression Inventory-II (BDI-II), The Brief Pain Inventory-Short Form-BPISF (consisting of two subscales: BPI1-intensity of pain, and BPI2-interference with daily functioning), The Vanderbilt Pain Management Inventory-VPMI (consisting of active-VPMIAC and passive pain coping mechanism subscales-VPMIPC) and The Pain Catastrophizing Scale-PCS (consisting of subscales of rumination, exaggeration and helplessness).

Results The average BDI-II score was 27.21 ($SD = 11.53$); the average score at BPI1 was 2.99 ($SD = 2.83$) and 3.35 ($SD = 3.26$) at BPI2; the average scores on the active coping mechanism subscale was 20.72 ($SD = 4.87$), and on the passive coping mechanism subscale 34.05 ($SD = 7.86$); the average catastrophizing scale score was 28.78 ($SD = 10.72$). Active mechanism of pain coping has shown significant negative correlation with depression ($r = -0.227$, $P > 0.05$) while passive mechanism of pain coping has shown significant positive correlation with depression ($r = 0.269$, $P > 0.05$). Intensity of depression was significantly positively correlated with intensity of catastrophizing to pain ($r = 0.358$, $P > 0.01$) and its derivatives: rumination, exaggeration and helplessness.

Conclusion Interventions focusing on targeting catastrophizing to pain and pain coping mechanisms should be considered in the treatment of patients with MDD with somatic pain.

Disclosure of interest The authors have not supplied their declaration of competing interest.

<http://dx.doi.org/10.1016/j.eurpsy.2017.01.694>