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Major depression (MD) is a major public health problem worldwide. Nevertheless, its pathophysiology remains unclear and no specific biological marker has been associated to the disease so far.

To investigate whether such marker(s) exist(s), we collected peripheral blood mononuclear cells (PBMC) from a restricted cohort of MD inpatients at two different time points: at the time of major depressive episode with melancholic features and 8 weeks later (median score on the Hamilton Depression Rating Scale were 38 and 14.5 ($p < 0.05$), respectively). We also collected PBMC from age and sex-matched control individuals. Total RNAs were extracted and we studied the mRNA level alterations of 83 candidate genes by qRT-PCR using the TaqMan Low Density Array technology.

When compared to control samples, a significant down- and up-regulation of mRNA level was observed for numerous genes involved in MD. Remarkably, while the transcription level of these genes was heterogeneous within both controls and patients, 8 weeks after the major depressive episode, it was very homogeneous during the acute phase of the disease. Furthermore, some mRNA level variations were statistically correlated to the clinical severity of the symptomatology during the acute phase.

Thus, we conclude that some mRNA level alterations provide a good signature of the MD state.

P0176

Major depression is very frequent in poorly regulated diabetes

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Background and Aims: It is often reported that patients with diabetes have increased risk of suffering from major depression (1). We wanted to study the frequency of depression in an special unit for diabetes at the University Hospital.

Methods: Fiftythree patients were recruited at this outpatient clinic. They were diagnosed using the structured clinical intervju MINI (2).

Results: Of the 53 patients with diabetes, 12 (23%) had an ongoing depressive episode. In addition 8 patients had suffered from previous episodes of depression. Thus 20(38%) had a lifetime history of major depression. Of the 12 patients with an ongoing depression, 58% had a first degree relative with psychiatric disorder, in contrast to 33% in those with no history of depression.

Conclusions: The propotion of depressive disorders in patients with poorly regulated diabetes, is very high. An astonishing finding is the very high frequency of first degree relatives with affective disorders.

It may be speculated that diabetes and depression have some pathophysiological features in common (3).

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Depression, sensitization and chaos in autonomic response: Implications for anticonvulsant treatment

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Background and Aims: According to recent findings stress experiences represent significant condition in pathophysiology of depression and influence abnormal development in the brain. Repeated stress and cognitive conflict also may determine limbic irritability and temporal-limbic epileptic-like activity. Because recent findings indicate that epilepsy and epileptiform processes are related to increased neural chaos, in the distinct contrast to normal brain activity, aim of this study is to find relationship between neural chaos in autonomic responses reflecting brain activity during stress activation and limbic irritability.

Method: For empirical examination of suggested hypothesis Stroop word-colour test, ECG recording, calculation of chaos indices i.e. largest Lyapunov exponents (LLEs) in nonlinear data analysis and psychometric measures of limbic irritability (LSCL-33) and depression (BDI-II) in 35 patients with unipolar depression and 35 healthy controls were used.

Result: Significant correlation $r = 0.68$ ($p < 0.01$) between LLEs and LSCL-33 found in this study indicate that degree of chaos in autonomic responses during conflicting Stroop task reflected by LLEs is closely related to limbic irritability. Significant correlation $r = 0.47$ ($p < 0.01$) also has been found between LLEs and symptoms of depression assessed by BDI-II. In the control group similar correlations have not been found.

Conclusion: The results are in agreement with findings that epileptiform activity represents typical form of chaotic organization. Because limbic irritability is linked to seizure-like processes in the temporo-limbic structures, the correlation between LSCL-33 and LLEs might represent useful finding for understanding of neurobiological mechanisms underlying stress-related sensitization and could be useful for future research regarding anticonvulsant treatment of depression.

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How to FACE[®] polydrug use: Pathways toward an integrative structured care model to facilitate adjustment of cognitions and emotions

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Background: Recent developments in the field of polydrug use along with alcoholism provide growing insights into how cognitive, affective, motivational and neurobiological pathways are altered in addictive persons. Few of these insights have as yet been implemented in everyday care.

Aim and Method: Framed within the multi-site FACE[®] program (Facilitating Adjustment of Cognitions and Emotions), this paper presents an integrative scientist-practitioner model that aims to translate the above insights into systematized multidisciplinary practice. The pathways from model to structured care are specified using a mixed-method design of bottom-up and top-down approach. Their

practice implementation over a three month course is illustrated with case series data in the context of an open-access, first-line addiction centre in the suburban Paris region.

Results: In as few as seven weeks, dramatic therapeutic improvements come forward. All polydrug patients referred due to long-term treatment refusal, are found to comply with the structured scientist-practitioner model approach. Multidisciplinary practitioner-observed benefits include increased or first-time therapy adherence and drug treatment compliance. Patient self-reported benefits moreover include increased addiction insight and mastery, along with enhanced cognitive-emotional regulation to gain control over addictive craving versus pleasure-seeking behaviours.

Conclusions: Applying an integrative model that focuses on the cognitive–emotional dynamics at hand in the addictive course with the polydrug using patient, and rigorously implementing related assessment and therapeutic methods manifestly bears immediate and middle-term benefits. Evaluation of longer term benefits is recommended, along with larger scale quantitative outcome analyses. Further research and practice implications are discussed to this respect.

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Association between diabetes and depression

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Depression is common among diabetics and it has indeed been suggested that one possibility for pharmacological treatment of insulin resistance is the use of antidepressive agents.

The aim of the present study was to determine the rate of depression in patients with diabetes and its characteristic.

We have 187 patients valued by a heteroquestionnaire, the mini-DSM IV diagnosis depression and dysthymia scale and the Hamilton depression scale. We also examined the relationship of depression and type of diabetes and the socios demographic characteristic.

The middle age of patients is of 53.06+14.11 years with a feminine predominance (71.1%). 67.9% of patients were married and the majority (75.4%) without profession.

The majority (85.6%) have type 2 diabetes, only 27 patients (50.49%) haven't treatment for diabetes, 36.9% have insulin and 52.9% have oral antidiabetiques. 43.3% had the degenerative complications of the diabetes. Major Depression was diagnosed at 41.2% patients, the dysthymia at 27.8 % patients. Severe depression has been noted at 5.3% of patients, and 22.5% had a moderate depression.

Our main finding is that depression in people with diabetes was frequent, from where the necessity of a hold in charge multidisciplinary.

P0180

The plasma IL-18, MIP-1 α , MCP-1, SDF-1 and rantes in patients with major depression

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Background and Aims: To investigate the plasma levels of IL-18, MIP-1 α , MCP-1, SDF-1 and RANTES in major depression before and after treatment.

Method: Twenty healthy volunteers and 40 patients with major depressive disorder (MDD) were involved in the current study. Depressed subjects had moderate or major depression according to the DSM-IV criteria. The HAMD scale was used to measure the efficacy after the 8-week treatment with fluoxetine hydrochloride. All subjects gave their written informed consents and were recruited from outpatients and inpatients of Sir Run Run Shaw Hospital between October 2004 and November 2005. The plasma levels of IL-18, MIP-1 α , MCP-1, SDF-1 and RANTES in major depression were measured by ELISA before and after fluoxetine treatment.

Results: HAMD score were significantly decreased after the treatment ($P < 0.001$), there were seven cases score of after treatment < 7 . At the time of admission, the plasma levels of IL-18, MCP-1, MIP-1 α , SDF-1 and RANTES were significantly higher in the MDD than those in the healthy controls ($P < 0.001$). In MDD, the cytokine values were significantly decreased after the treatment, including IL-18 ($P = 0.005$), MCP-1 ($P = 0.001$), MIP-1 α ($P < 0.001$), SDF-1 ($P = 0.004$) and RANTES ($P < 0.001$), but still significantly higher than those in the healthy controls ($P < 0.001$).

Conclusions: These findings suggest that major depression is accompanied by the immune activation, and the antidepressant treatments have anti-inflammatory effects. The remaining depression symptom after treatment may be related to the higher level of cytokines.

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Corelation between chronic pain and depression in general pathology: An observational study

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Pain, especially chronic pain, is an emotional condition as well as a physical sensation. It is a complex experience that affects thought, mood, and behavior and can lead to isolation, immobility, and drug dependence.

Pain is depressing, and depression causes and intensifies pain. People with chronic pain have three times the average risk of developing psychiatric symptoms — usually mood or anxiety disorders — and depressed patients have three times the average risk of developing chronic pain.

The distinct and complex character of any somatic disorder reveals the importance of social and cultural influences and that of the psychological and behavioral dimensions of pain.

The objective of the first study is to prove the high frequency of a depressive syndrome on a significant group of patients with general medical conditions. The second study attempts to prove the efficiency of antidepressive medication (SSRI like) in reducing the pain related symptoms using the Hamilton Depression Evaluation Scale on a significant group of patients from the "Socola" Hospital in Iasi.

The findings of the two studies have a common point: the urge to include in the assessment and management protocols of any somatic disorders, pain and depression diagnostic and treatment elements, due to their algorithmic relationship.