

tomography showed bilateral symmetric calcification of striatum, globus pallidus and dentate nuclei. Other causes of intracranial calcification were excluded. PET scans were obtained using [11C]-labeled 2 β -carbomethoxy-3 β -(4-fluorophenyl)-tropane, [11C]-labeled raclopride and [18F] fluorodeoxyglucose.

Results: The decreased binding potential was severe in bilateral head of caudate nuclei and anterior putamen. In case 1, the decline was also found in posterior putamen. There were widespread decreases of glucose uptake in frontal, temporal and parietal cortices bilaterally in case 1. Significant hypometabolism was observed in the right frontal, temporal and parietal cortices. After the ECT session, the previous areas of significant hypometabolism in the right hemisphere had improved. In case 2, there was no significant change of glucose metabolism in cerebral cortex.

Conclusions: The difference in affected region within basal ganglia might be associated with the diverse clinical pictures in IBGC. Particularly, in the psychiatric manifestation, dopaminergic dysfunction in caudate nucleus and anterior putamen could be participated.

P0166

Effect of Buspirone, a Serotonin partial agonist, on cognitive function in schizophrenia: A randomized, double-blind, placebo-controlled study

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The goal of this randomly-assigned placebo-controlled double-blind study was to determine if the addition of buspirone, a widely available 5-HT_{1A} partial agonist, would enhance cognitive function, in subjects with schizophrenia treated with atypical antipsychotic drugs (AAPDs). Seventy-three patients with schizophrenia, who had been treated with an AAPD for at least three months, were randomly assigned to receive either buspirone, 30 mg/day, or matching placebo. All other medications remained unchanged. Attention, verbal fluency, verbal learning and memory, verbal working memory, and executive function, as well as psychopathology, were assessed at baseline, and 6 weeks, and 3 and 6 months after baseline. A significant Time x Group interaction effect was noted on the Digit Symbol Substitution Test, a measure of attention/speeded motor performance, due to better performance of the buspirone group compared to the placebo group at 3 months. No significant interaction effects were noted for other domains of cognition. Scores on the Brief Psychiatric Rating Scale (Total, Positive) were improved during treatment with buspirone but not placebo, but the effects did not reach statistical significance.

The results of this study showed a possible benefit of buspirone augmentation of AAPDs to enhance attention. However, we did not replicate the results of the previous study with tandospirone that improved executive function and verbal learning and memory, which may be due to the differences between tandospirone and buspirone, between typical antipsychotics and AAPDs, or a combination of the above. Further study to determine the usefulness of 5-HT_{1A} agonist treatment in schizophrenia is indicated.

P0167

The effect of mGluR I and II agonist on cognitive deficit in animal model of psychosis-like behavior

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One of the major arguments that glutamatergic system may be disrupted in schizophrenia represents fact that antagonists of the NMDA receptor impairs cognitive function in healthy volunteers in a manner that is very similar to the cognitive deficit observe in patients with schizophrenia. Consequently application of NMDA antagonists were established as an animal model of schizophrenia

NMDA receptors are present by nearly all subtypes of neurons, and that is why direct pharmacological manipulation of this group of receptors may produce a global disruption in brain function and produce profound side effects. Hence indirect modulation of glutamatergic transmission by metabotropic glutamate receptors (mGluR) is numbered among promising approaches.

Testing the cognitive abilities of animals with experimentally induced psychotomimetic state requires specific behavioral paradigms, which should have a high cognitive demand for their efficient solution. For that reason we used test active aliothetic place avoidance (AAPA). This spatial task is suitable for detection of attention and information processing.

Application of NMDA antagonist MK-801 (0.1 mg/kg) leads to slight cognitive deficit without changes in locomotion. We investigated effect of ACPD (agonist of mGluR group I and II) in doses 0.01 mg/kg a 0.1 mg/kg. Administration of ACPD alone did not influence locomotor activity and cognitive parameters. ACPD significantly improved performance of AAPA task after MK-801. Studied drug even reduced massive cognitive disturbances and hyperlocomotion after MK-801. Our results show that agonists of mGluR I and II could enhanced cognitive function in patient with schizophrenia. Project was supported by IGA MZCR NR/9178-3; MSMT 1M0517.

Poster Session II: Depression

P0168

Assessment of depression in primary care medical practice in Bucaramanga/Colombia

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Depression is a public health problem. WHO estimate that in 2020 this one would be the first cause of mortality in the world. Additionally, this disorder generate impaired ability to continue professional work and/or daily life activities, impaired social life and previous psychiatric problems were significantly correlated with impaired physical function, fatigue and pain.

The aim of this study was to investigate the prevalence of depression in patients seen at the Clínica Chicamocha in Bucaramanga/Colombia, using the Hospital Anxiety and Depression Scale (HADS), the Beck Depression Inventory (BDI-II) and a sociodemographic questionnaire. In addition, information about the patients' diseases and treatment was obtained. The prevalence of depression among 82 evaluable patients was 41.5% according to BDI-II (19.5%

moderate depression; 14.6% minor depression and 7.3% severe depression). So, using HADS the depression prevalence was 11%. Another hand, somatic was more prevalent than cognitive and affective symptoms in simple. There was statistical difference in depression by gender, so women obtain more high score than man. Education level and socio-economical status were a inverse relation with depression. So, people with university studies and high socio-economical level obtained minor scores in BDI-II and HADS. Hospitalization upper 7 days was correlated with high score in depression. And, finally, social support is a protector factor in depression in medical setting.

Careful attention should be paid to patients in primary care medical practice in order to detect depression symptoms because this situation increase hospitalary stay, cost and medical complications and decrease improving process and rehabilitation.

P0169

The change of vegetative regulation at the different stages of major depressive disorder

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Background and Aim: The aim of the study is to investigate vegetative reactivity at the different stages of major depressive disorder (MDD).

Methods: clinico-psychopathological method, clinico-anamnestic method, the Zung self-rating depression scale, the method of the heart rate variability analysis for assessment of vegetative regulation. The study is conducted from 2000 to 2007. In the first part of the study the assessment of vegetative regulation at the initial stage of MDD is provided (82 patients even 72 healthy persons). In the second part the vegetative regulation is studied at the stages of stabilization and reduction of MDD (76 patients even 66 healthy persons).

Results: The results of investigation are shown reduction in the total heart rate variability, increase in tension level of regulatory systems at the initial stage of MDD. The activity balance of the sympathetic, parasympathetic and suprasedgmental mechanisms of autonomic nervous system remains.

At the stage of depression stabilization the disruption of different components of autonomic nervous system balance occurs. The prevalence of the activity of suprasedgmental ergotropic systems and the functional decrease of sympathetic mechanisms activity are observed. At the stage of the depression reduction the decrease of the activity of suprasedgmental ergotropic systems with the hyper-activation of peripheral sympathoadrenal mechanisms are revealed.

Conclusions: Obtained data could be considered in chose and efficiency rating of therapy at the different stages of MDD.

P0170

Alexithymy and depression in chronic dermatosis

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Alexithymy is a concept developed by the psychosomatic Paris school. It means the incapacity to express emotions by words and

to differentiate them from the body feelings with a limitation of imaginary life and an operational way of thinking.

It is regarded as a characteristic operating mode of patients suffering of diseases with psychosomatic components.

We made a study in the university service of dermatology with the objective to measure the degree of alexithymy at patients presenting a chronic dermatosis and to establish correlations between this psychological state, the type and the extent of dermatosis and depression.

We used a questionnaire studying socio-demographic elements of our patients, pathological antecedents, type of dermatological lesions and their extents.

alexithymy was measured by Toronto scale in version with 20 items (TAS-20). Depression was evaluated by Hamilton scale. The statistical analyzes were carried out with SPSS. The correlations between alexithymy, depression and the extent of the lesions were carried out by using Pearson coefficient.

Our sample is composed of 75 subjects. 60,5% were hospitalized. 52,6% are represented by men. The mean age was 40,34 years with extremes from 15 to 89 years.

Dermatoses are represented particularly by psoriasis, skin wool, pemphigus and urticaria. The lesions were extended in 40,8%.

The mean score of TAS-20 is 54,75, the mean scores of the three principal factors were also measured. The correlations between TAS-20, HAM-D and the extent of the lesions were significant.

P0171

Bruxist behaviour in a patient with depression: A reported case

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Background and Aims: Bruxism is the most common form of maxillofacial hyperkinesia. Behavioral disorders as well as affective psychological factors, depression and anxiety being one of the most prominent factors, can together with emotional stress, induce bruxism. There has been the correlation between medications and bruxism (for example SSRI's).

Method: We reported a case of a 47-year-old female patient who has been psychiatrically treated for depression since 1988 (F 32.1 by ICD 10). In 2005, she was hospitalised for the second time, this time for depression with psychotic traits (F 33.3 by ICD 10) due to which she was also hospitalised in 2006 and 2007. During 2005 and 2006 she was taking mirtazapine, paroxetine as well as olanzapine and since 2007 she has been taking sertraline and olanzapine.

Results: There was an excessive wear of tooth surfaces and edges due to bruxism on seven-year-old bridge, which she noticed herself two years ago. She was awake during the diurnal bruxism and nocturnal bruxist activity was confirmed by her husband. Michigan splint was fabricated, thus alleviating the destructive impact of masticatory forces on the teeth and their supportive tissues.

Conclusions: Bruxism, associated with medications or mental disorders and very detrimental to teeth, the periodontium and oral health in psychiatric patients should be also treated as a general health problem and oral health problem. The prognosis for stopping bruxist activity is bad because a complete prosthodontic treatment was extremely limited due to the patient's psychiatric condition.