

lead to impaired social cognition resulting from ToM deficits. Studies examining ToM in patients with Traumatic Brain Injury (TBI) have yielded conflicting findings.

Objectives: To assess the nature and extent of Theory of Mind (ToM) impairments post-TBI.

Methods: Electronic databases searches included PubMed/MEDLINE, PubMed Central, Scopus, PsychArticles, PsychINFO, Web of Science, ProQuest Central, and Wiley Online Library databases. Only studies conducted on adult patients with TBI compared with healthy controls published in English in peer-reviewed journals were considered. Reference lists were manually checked for additional studies. 19 studies were identified.

Results: Marked moderate-to-severe ToM deficits in adults post-TBI were observed across all severities of injury and chronicity. ToM deficits were documented across tasks and reflected a hierarchy where performance worsened significantly as tasks progressed in complexity. Despite supportive factors, certain aspects of ToM impairment, such as ability to detect and interpret non-literal speech and judge appropriateness of context remained affected in the subjects.

Conclusions: ToM deficits represent a robust finding in adults with TBI. The chronicity of TBI requires a long-term view and is complicated by the fact that ToM deficits are invisible and difficult to understand. Perceptive-taking deficits faced by TBI sufferers has bio-socio-economic implications. This review also discusses implications for basic and clinical neuropsychology and rehabilitation efforts. Further research is needed, particularly in the form of large, longitudinal studies that mimic day-to-day interactions, to inform/support rehabilitation programs.

Disclosure: No significant relationships.

Keywords: theory of mind+ traumatic brain injury; theory of mind + brain damage; theory of mind+ head injury

EPV0407

Research on neurophysiological and behavioral measures of attentional and inhibitory processes in adult young with ADHD

L.R. Carreiro^{1*}, A.A. Osório¹, M.C. Teixeira¹, W. Machado-Pinheiro², J. Nascimento¹ and A. Afonso Junior¹

¹Developmental Disorders Graduate Program, Mackenzie Presbyterian University, São Paulo, Brazil and ²Departamento De Ciências Da Natureza, Universidade Federal Fluminense, Rio das Ostras, Brazil

*Corresponding author.

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Introduction: Attention Deficit Hyperactivity Disorder (ADHD) is characterized by harmful levels of inattention, hyperactivity, and impulsivity and occurs in 2.5% of adults.

Objectives: This project will evaluate young adults with ADHD in computerized tasks that assess different forms of attention and inhibition, correlating them with self-report scales and physiological measurements (EMG and fNIRS) to identify impairments in specific cognitive domains.

Methods: The study will be conducted with two groups: one with ADHD - GClin and one control - CG, with 50 participants between 18 and 28 years each. Initially, participants will perform CPT-3 and respond to ASRS to be allocated to the CG or GClin, with validation

by a specialist physician. After that, they will do the computerized inhibition (Stroop / Stop) temporal and spatial attention (voluntary and automatic) tests. In this phase the data will be collected using electromyographic measurements and recording of brain activity in areas of the prefrontal and temporal cortices through fNIRS. After the tests they will complete the impulsivity scales (BIS-11 and UPPS). The analyzes will comprise: (1) ANOVA of the means of TRs and the accuracy of the computerized tests; (2) Correlation analysis of RT, accuracy and ASRS scores; and (3) The fNIRS analysis will use the oxyhemoglobin signal, which will be analyzed individually.

Results: As expected results there will be differences between CG or GClin in relation to impulsiveness, number of errors and brain activation.

Conclusions: The integration of physiological measurements, scales and tests will ensure integrated understanding of attentional and inhibitory processes impaired in ADHD.

Disclosure: No significant relationships.

Keywords: ADHD; temporal and spatial attention; fNIRS; inhibition

EPV0408

The use of light, temperature and pressure in the treatment of depression

D. Zalewski*, A. Nobis, E. Dąbrowska and N. Waszkiewicz

Department Of Psychiatry, Medical University of Białystok, Choroszcz, Poland

*Corresponding author.

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Introduction: Climate and weather have a great influence on the prevalence of depressive disorders. Selected physical parameters for instance light, temperature and pressure can be used to treat mood disorders.

Objectives: The present mini-review aims at approximating the mechanisms by which selected, strictly controlled physical parameters in particular light, temperature, and oxygen pressure can help in the treatment of depression and determine their potential effectiveness.

Methods: Relevant literature was identified by searching the PubMed/Medline database, by combining the search strategy of free text terms and exploding a range of MESH headings relating to the topics.

Results: Mechanisms that can modify the course of depression were briefly presented. Review of the literature showed the well-established position of bright light therapy (BLT) effective in treating seasonal (SAD) and non-seasonal affective disorders (non-SAD); safety and rapid-action of whole-body hyperthermia (WBH) and whole-body cryotherapy (WBC) were also demonstrated; the least data was available on hyperbaric oxygen therapy (HBOT), which had antidepressant properties only in people with concomitant neurological damages.

Conclusions: In addition to the well-established position of BLT in the treatment of depression, further research is needed on other methods, such as WBH, WBC, HBOT.

Disclosure: No significant relationships.

Keywords: light; Depression; temperature; pressure

EPV0409

Mechanisms linking gut microbiota to depression

A. Fraga^{1*}, D. Esteves-Sousa¹, J. Facucho-Oliveira¹, M. Albuquerque¹, M. Costa¹, P. Espada-Santos¹, N. Moura² and A. Moutinho¹

¹Psychiatry, Hospital de Cascais, Cascais, Portugal and ²Psychiatry Department, Ocidental Lisbon Hospital Center, Lisboa, Portugal

*Corresponding author.

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Introduction: The gut microbiota constitute the largest and most diverse community in the body which is primarily responsible for the maintenance of the intestinal wall integrity and the protection against pathogens. Besides having an important role in the regulation of host energy metabolism, the gut microbiota can also influence neurodevelopment, modulate behavioral and might contribute to the development of psychiatry disorders.

Objectives: The authors elaborated a narrative literature review to understand how gut microbiota can influence depression.

Methods: Using PubMed as the database, a research was conducted about how Gut Microbiota relates with Depression.

Results: The microbiota-gut-brain axis encompasses the strong bidirectional communication between the gut microbiota and the CNS. Multiple mechanisms may be involved in this bilateral communication, including immune, endocrine and neural pathways. Permutations in the gut microbiome composition trigger microbial lipopolysaccharides production that activates inflammatory responses. Cytokines send signals to the vagus nerve, which links the process to the hypothalamic-pituitary-adrenal axis that consequently causes behavioral effects. Beyond this, gut microbiota have the capacity to produce many neurotransmitters and neuromodulators such as serotonin and can induce the secretion of the brain-derived neurotrophic factor, an important plasticity-related protein that promotes neuronal growth, development and survival.

Conclusions: Neuroinflammatory processes like those that occur in depression are deeply modulated by peripheral inflammatory stimuli, especially those from the intestinal microbiota. However, the knowledge is currently limited and the information available is not enough to understand the exact mechanisms. Therefore, more studies are required to show how gut microbiota influences the human brain.

Disclosure: No significant relationships.

Keywords: Gut-brain axis; Gut Microbiota; Depression

Obsessive-compulsive disorder

EPV0410

Scissors and tweezers: A skin-picking disorder case report

S. Vilas Boas Garcia^{1*}, N. Fernandes², I. Coelho³, R. Costa³ and R. Durval³

¹Unidade Partilhada, Centro Hospitalar Psiquiátrico de Lisboa, Lisboa, Portugal; ²Serviço De Psiquiatria, Hospital de Santarém, Santarém, Portugal and ³Centro Hospitalar Psiquiátrico De Lisboa, Centro Hospitalar Psiquiátrico de Lisboa, Lisbon, Portugal

*Corresponding author.

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Introduction: Skin-Picking Disorder (SPD) is psychiatric condition characterized by recurrent and excessive picking of the skin. There are several attempts to stop the behavior and it causes negative consequences such as dermatological complications and functional impairment.

Objectives: The aim of this study is to describe a case report of SPD.

Methods: Data was collected retrospectively from case notes.

Results: A 30 year-old male, married with 2 children, currently on sick leave, was admitted to the Day Hospital at Centro Hospitalar Psiquiátrico de Lisboa (CHPL) with worsen skin-picking behaviour and functional impairment. During childhood the patient would “cut my toe nails the wrong way so that I could fix them”. By adolescence the patient suffered from acne and felt the need to “solve” them and take out the pus. Over the years the skin-picking behaviour spread to other areas of the body, mainly dorsal and chest areas. Before being admitted to the Day Hospital the episodes were daily and had 2-3 hours duration, using scissors and tweezers and evolving his family, asking his wife’s help with picking. He is being treated with fluoxetine 80 mg, risperidone 2 mg and N-acetylcysteine 1200 mg and Cognitive Behavioural Therapy. He is also participating in the Day Hospital activities that include occupational therapy, movement therapy, psychoeducation. After 2 months he has a few 20 minutes episodes per week, spends more time with his children and thinks about coming back to work.

Conclusions: SPD is a severe and debilitating illness that benefits from a multidisciplinary approach.

Disclosure: No significant relationships.

Keywords: skin-picking disorder; excoriation disorder; obsessive-compulsive disorders

EPV0411

Revisiting the “obsessional slowness” syndrome

C. Pedro Fernandes^{1*}, M. Mangas², B. Jorge³ and D. Freitas¹

¹Psychiatry, Hospital de Braga, Braga, Portugal; ²Serviço De Psiquiatria, Unidade de Saúde Local do Baixo Alentejo, Beja, Portugal and ³Serviço De Psiquiatria, Hospital de Braga, Braga, Portugal

*Corresponding author.

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Introduction: Obsessional slowness (OS) is a rare condition of disabling slow motor performance, first described in 1974, by Rachman, who documented 10 cases of “primary obsessional slowness”. Rachman argued that, although his patients with OS had Obsessive Compulsive Disorder (OCD), their motor symptoms were not related to the presence of motor-slowness-triggering obsessions/compulsions (e.g. checking and mental rituals). Whether OS truly is a distinct and “primary” entity is still a controversial issue, however.

Objectives: To present and discuss the phenomenology of OS.

Methods: Case reports of OS published in the literature, including Rachman’s descriptions.

Results: The literature on OS is extremely limited, with no published, large-scale descriptive studies or randomized controlled trials. Some authors doubt that OS is a “primary” condition, pointing out the clear overlap between OS and catatonia and