### EPV0902

# Long-term effects of Cushing's Disease on visuospatial planning and executive functioning

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**Introduction:** Patients with remitted Cushing's Disease (CD) often present persisting impairments in executive and cognitive functioning domains. Little research has been conducted regarding the functional neural correlates of an important executive functioning skill, namely the ability to plan, in these patients.

**Objectives:** To examine visuospatial planning related brain activity in remitted CD patients and matched controls using functional magnetic resonance imaging (fMRI).

**Methods:** fMRI scans were made using a 3-Telsa scanner while remitted CD patients (n=21) and age-, gender-, and education matched healthy controls (HCs; n=21) completed a parametric Tower of London (ToL) task. Psychological and cognitive functioning were assessed using validated questionnaires. Clinical severity was assessed retrospectively using the Cushing's syndrome Severity Index (CSI).

**Results:** CD Patients were on average 45.1 (SD=7.1) years old, 81% female, and in remission for mean 10.68 (SD=7.69) years. No differences were found in number of correct trials, response times per ToL trial, or in the region of interest analyses. Exploratory wholebrain analyses found that CD patients showed more activation in several brain regions associated with higher cognitive processes on 2-, 3-, and 5-step trials compared to HCs. Overrecruitment of the right parietal operculum cortex in the patients was significantly negatively associated with the prior active disease state on the CSI (r=-0.519, p=0.02).

**Conclusions:** The increased brain activation during the ToL in remitted CD patients versus controls signals over-recruitment of certain brain areas involved in higher cognitive processes. CD may thus result in long-lasting, subtle scarring effects during demanding executive functioning tasks, despite remission.

Disclosure: No significant relationships.

**Keywords:** Cushing's Disease; cognitive planning; executive functioning

## EPV0901

# The brain in oral clefting: preliminary results of a systematic review with meta-analyses.

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 <sup>1</sup>University of Pécs, Paediatrics, Pécs, Hungary; <sup>2</sup>Borlänge Specialist Clinic, Region Dalarna, Adult Psychiatric Division, Borlänge, Sweden; <sup>3</sup>University of Pécs, Department Of Paediatrics, Pécs, Hungary and <sup>4</sup>Medical University of Graz, Oral Surgery Department, Faculty Of Dentistry, Graz, Austria \*Corresponding author. doi: 10.1192/j.eurpsy.2022.1644 **Introduction:** Previous neuroimaging studies of individuals with nonsyndromic oral clefts have revealed subtle brain structural differences compared to matched controls. Additional studies strongly suggest that the higher incidence of neuropsychiatric issues observed in these individuals may be explained by these neuroanatomical differences. Currently there are no studies that have assessed the overall empirical evidence of the effect of oral clefts on the brain.

**Objectives:** Our aim was to summarize available evidence on potential brain structure differences in individuals with nonsyndromic oral clefts and their matched controls. In the current presentation, we discuss the results of regional brain structural differences.

**Methods:** Five databases were systematically searched in September 2020 for case-control studies that reported neuroimaging in healthy individuals and individuals with nonsyndromic oral clefts. Duplicate study selection, data extraction, random effects meta-analyses of mean differences (MDs) and their 95% confidence intervals were performed in order to compare regional brain MRI volumes.

**Results:** We have identified 245 records following the database searches, from which 12 records met the inclusion criteria. Quantitative data on brain structure were available in three studies. The cerebellum, occipital and temporal lobes were significantly smaller in the cleft group compared to controls (MD: -12.46, 95% CI: -18.26, -6.67, n=3 studies; MD:-7.39, 95% CI: -12.80, -1.99, n=2 studies; MD: -10.53, 95% CI: -18.23, -2.82, n=2 studies, respectively).

**Conclusions:** There may be structural brain differences between individuals with nonsyndromic oral clefts and their controls based on the available evidence.

**Disclosure:** No significant relationships. **Keywords:** cleft lip; cleft palate; Brain; Neuroimaging

#### EPV0902

#### Image testing in psychiatrics: a bibliografic review

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**Introduction:** Psychoradiology is a term that describes a growing interest in relating psychiatry and radiological images, proposing a radiological approach in the management of major psychiatric illnesses. This includes the diagnosis, the planning of the treatment and the study of the clinical course.

**Objectives:** The objective of this communication is to review the current status of the importance and indications of neuroimaging tests in psychiatry.

Methods: A literature review has been carried out to review this issue.

**Results:** In schizophrenia, longitudinal studies have been carried out that compare the anatomical structures between a first psychotic episode and in a chronic state, locating regional changes that progress as the disease does. Anatomical alterations have also been detected among patients with a predominance of positive symptoms or negative symptoms. Although more and more studies demonstrate a

certain common genetic and radiological basis between bipolar disorder and schizophrenia, imaging techniques can also show specific findings that differentiate one pathology from the other. The neuroimaging tests used in psychiatry are: • Brain CT, recommended when a first psychotic episode is suspected. • MRI: recommended in processes of cognitive deterioration, to evaluate white matter and for pregnant patients. It is also recommended to evaluate injuries that could have a poor prognosis with the application of electroconvulsive therapy. • Functional tests (PET and SPECT) are often used to screen some types of dementia such as Alzheimer's or for research. **Conclusions:** New advances and knowledge in psychiatry and radiology must be integrated for better clinical practice.

**Disclosure:** No significant relationships. **Keywords:** Neuroimaging; Psychoradiology

#### **EPV0904**

### Neuroimaging in psychiatry: is it relevant?

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**Introduction:** The upturn of neuroimaging techniques in the past 30 years has changed the study of the biology of psychiatric disorders with implications for psychiatric practice. Thrive in medical imaging technology has, in fact, truly reformed nearly every medical field.

**Objectives:** These advances include both improvements in image resolution and the development of novel imaging techniques all of which provide an unprecedented view, in detail, of anatomical structures and/or functions in the human body.

**Methods:** Nowadays, we are familiar with the role of some brain structures such as the amygdala, the thalamus, the hippocampus, the dorsolateral prefrontal cortex, and the insula in neuropsychiatric function. For example, lesions to the frontal cortex can disrupt judgment, motivation and social behavior.

**Results:** Currently, most imaging techniques have some sort of clinical application, but this is usually restricted to a limited number of cases. New techniques have provided invaluable information not only about the brain structure and function associated with psychiatric disorders but increasingly about the mechanisms underpinning these disorders.

**Conclusions:** Growing understanding of the specific pathophysiology of mental disorders prepares us for improvement in the identification of diagnostic and prognostic biomarkers, which could lead to more accurate diagnoses and prediction of treatment response of the disorders managed in everyday clinical practice. Of note, the identification of neural biomarkers could potentially identify people at risk of developing a particular illness.

**Disclosure:** No significant relationships. **Keywords:** Neuroimaging; psychiatry

#### **Obsessive-Compulsive Disorder**

#### **EPV0905**

#### A narrative approach to trichotillomania

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**Introduction:** Trichotillomania is an obsessive-compulsive spectrum disorder characterized by recurrent and uncontrolled hair pulling. This behavior causes significant anxiety as well as low selfesteem in people who suffer from this disorder. There is still no therapy of proven efficacy in the treatment of trichotillomania. Psychotropic drugs and cognitive behavioral psychotherapy have been tried in the management of this disease, but the relapse rate is high. Narrative therapy is an innovative type of postmodern psychotherapy and in our literary search we have not found data related to its use in the treatment of trichotillomania.

**Objectives:** To present a novel therapeutic approach to a highly resistant disorder, trichotillomania.

Methods: Case report and literature review.

**Results:** We present a case of a 39-year-old woman diagnosed with trichoticolomania twenty years earlier. She tried several types of psychotherapies for manage her hair-pulling problem, all related with relapse only a few days after finishing the sessions. We have carried out a total of 5 narrative therapy sessions spread over 3 months. No relapses have been observed during the subsequent 9-month follow-up period.

**Conclusions:** Based on our experience, we believe that Narrative Therapy is a good and still unexplored alternative for people diagnosed with trichotillomania.

**Disclosure:** No significant relationships. **Keywords:** Trichotillomania; OCD; Narrative Therapy

#### **EPV0906**

## Assessing response, remission and treatment resistance in patients with Obsessive-Compulsive Disorder with and without Tic Disorders: results from a multicenter study

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