

**Conclusions:** The present study offers preliminary evidence for the adoption of i-ECO (integrated-Explainability through Color Coding) in fMRI analyses during rest in the Psychiatric field.

**Disclosure:** No significant relationships.

**Keywords:** ReHo; Eigenvector Centrality; fMRI; fALFF

## EPP0262

### The effect of antidepressant treatment on white matter integrity in Major Depression

S. Tourjman<sup>1\*</sup>, S. Potvin<sup>1</sup>, R. Milan<sup>2</sup>, E. Kouassi<sup>2</sup> and D. Luck<sup>2</sup>

<sup>1</sup>Institut Universitaire en Santé Mentale de Montréal, Psychiatrie, Montréal, Canada and <sup>2</sup>McGill University, Medicine, Montréal, Canada

\*Corresponding author.

doi: 10.1192/j.eurpsy.2022.555

**Introduction:** White matter abnormalities have been identified in major depressive disorder (MDD). Although several diffusion tensor imaging studies found decreased fractional anisotropy (FA) in MDD, the effect of antidepressants (AD) treatment on white matter integrity has been insufficiently studied.

**Objectives:** We sought to examine the effect of AD treatment of MDD on white matter, using DTI, in responders compared to nonresponders.

**Methods:** We included 25 individuals with MDD (HAMD  $\geq 20$ ) without inflammatory, unstable medical/neurological conditions or prolonged duration ( $> 1$  year), or AD or anti-inflammatory treatment  $\geq 1$  week preceding first evaluation. Evaluation before treatment and at 16 weeks included depression rating scales, a cognitive battery, inflammatory markers and MRI. Desvenlafaxine was initiated at 50mg with a possible increase to 100mg at 8 weeks.

**Results:** Changes included: increased volume in responders in the right Inferior Fronto-Occipital fasciculus ( $p=0.0315$ ) and Superior Longitudinal Fasciculus part 3 ( $p=0.0050$ ); in remitters in the right Inferior Fronto-Occipital fasciculus ( $p=0.0359$ ) and Superior Longitudinal Fasciculus part 2 ( $p<0.05$ ) and 3 ( $p=0.0481$ ); decreased volume in responders in the left Superior Longitudinal Fasciculus part 1 ( $p=0.0147$ ) and left Corona Radiata ( $p<0.05$ ); and in remitters in the left Superior Longitudinal Fasciculus part 1 ( $p=0.0109$ ) and the Corpus Callosum part 5 ( $p<0.05$ ); decreased FA in the right Cortico Spinal Tract in remitters ( $p=0.0175$ ) and responders ( $p=0.0272$ ), and an increase in FA in the left Uncinate Fasciculus in nonremitters ( $p=0.0493$ ). These results lose significance following Bonferroni correction.

**Conclusions:** Overall, AD treatment of MDD was not associated with significant changes in FA, whole brain, or specific tract volume in this study.

**Disclosure:** This research was funded by Pfizer Canada.

**Keywords:** Neuroimaging; Depression; antidepressant; DTI

## EPP0263

### CLINICAL CASE “I finally woke up, it seems like a miracle”

H.J. Min

CAULE, Psychiatry, León, Spain

doi: 10.1192/j.eurpsy.2022.556

**Introduction:** Clinical case about a 62 year old patient, diagnosed with mixed anxiety-depressive disorder. In current treatment with Paroxetine, Clorazepate and Trazodone. She presents low spirits secondary to a neurological process (stroke + amyloid angiopathy+ epilepsy+ cognitive impairment) and difficulties in performing daily activities. Her daughter reports that she is totally dependent, she spends the whole day in bed. On examination we observe a dull mood, without emotional reactivity. Lack of motivation. Psychomotor slowness. Significant cognitive impairment with difficulties in performing daily activities. Mnesic faults.

**Objectives:** Clinical case shows radiological and cognitive improvement with vortioxetine

**Methods:** Last diagnoses: August 2020: HSA OF THE FRONTAL AND PARIETAL GROOVES RIGHTS September 2020: SYMPTOMATIC FOCAL EPILEPSY SECONDARY TO LEFT FRONTAL-PARIETAL INTRAPARENCHIMATOUS HEMATOMA December 2020: MYELOID ANGIOPATHIA February 2021: SUBARACHNOID HEMORRHAGE March 2021: DEPRESSIVE DISORDER SECONDARY TO MEDICAL ILLNESS - MODERATE COGNITIVE IMPAIRMENT

**Results:** Spectacular improvement in mood and cognitive deficit. The family reports that after 5 days they noticed the change. They find her more lively, she has returned to doing housework and is autonomous for day-to-day life. She has regained her memory and performed calculation exercises on a daily. The patient says that she has returned to being her usual self, “before I felt like a mummy and now I have finally woken up, it seems like a miracle”.

**Conclusions:** It has improved much with change of antidepressant, from paroxetine to vortioxetine in patient who show in cranial MRI: New-onset lesion in the right frontal lobe attributable and subarachnoid hemorrhage located in convex furrows, radiological findings in favor of amyloid angiopathy

**Disclosure:** No significant relationships.

**Keywords:** MYELOID ANGIOPATHIA; SUBARACHNOID HEMORRHAGE; DEPRESSIVE DISORDER SECONDARY; MODERATE COGNITIVE IMPAIRMENT

## EPP0264

### Resting-state EEG networks characterized by intramodular and global hyperconnectivity in depressive sample

A. Komarova\*, A. Kisel'nikov, M. Yurlova, E. Slovenko, I. Tan, D. Mitiureva, P. Kabanova, E. Terlichenko, V. Zubko and E. Shcherbakova

Lomonosov Moscow State University, Psychology, Moscow, Russian Federation

\*Corresponding author.

doi: 10.1192/j.eurpsy.2022.557

**Introduction:** Depression is characterized by a pattern of specific changes in the network organization of brain functioning.

**Objectives:** We researched a graph structure specificity in a depressive student sample by analyzing resting-state EEG. All possible combinations of graph metrics, frequency bands, and sensors/sources levels of networks were examined.