

but also the degree of adherence to the psychotropics. -DSM5 Anxious distress specifier is not well studied in the 1st manic episode of bipolar disorder.

**Objectives:** 1-To study the role of DSM5 Anxious Distress Specifier in the symptoms severity of 1st diagnosed manic episode 2-To investigate its role in medication adherence in these patients

**Methods:** 1-DSM 5 Anxious distress specifier interview which includes 5 items : a- Keyed up or tense b-Restlessness c-Impaired concentration. d-Sense of foreboding e-Loss of control 2-The Young Mania Rating Scale (YMRS) is one of the most frequently utilized rating scales to assess manic symptoms. The scale has 11 items and is based on the patient's subjective report of his or her clinical condition 3-Drug Attitude Inventory:consists of a questionnaire that is completed by the patient, pertaining to various aspects of the patient's perceptions and experiences of treatment.

**Results:** 1-There is a positive correlation between the mean score of Young mania Rating scale in 1st episode manic patients and the mean score of DSM5 Anxious Distress specifier Interview 2-The presence of high score of DSM5 Anxious Distress Specifier Interview is positively correlated to the mean score of Drug Attitude Inventory during the follow up visits after controlling the 1st episode mania

**Conclusions:** The presence of high levels of Anxious Distress in the 1st episode mania affected the symptoms severity and medication adherence

**Disclosure:** No significant relationships.

**Keywords:** severity; Anxious; mania; Adherence

#### EPV0054

### The Role of Base Excision Repair in Major Depressive Disorder and Bipolar Disorder

M. Kucuker<sup>1</sup>, A. Ozerdem<sup>1</sup>, D. Ceylan<sup>2</sup>, A. Cabello-Arreola<sup>3</sup>, M.C. Ho<sup>1</sup>, B. Joseph<sup>1</sup>, L. Webb<sup>4</sup>, P. Croarkin<sup>1</sup>, M. Frye<sup>1</sup> and M. Veldic<sup>1\*</sup>

<sup>1</sup>Mayo Clinic Depression Center, Department Of Psychiatry & Psychology, Rochester, United States of America; <sup>2</sup>Koc University, Department Of Psychiatry & Psychology, Istanbul, Turkey; <sup>3</sup>Mayo Clinic Depression Center, Department Of Psychiatry & Psychology, Scottsdale, United States of America and <sup>4</sup>Mayo Clinic, Alix School Of Medicine, rochester, United States of America

\*Corresponding author.

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**Introduction:** In vivo and in vitro studies suggest that inflammation and oxidative damage may contribute to the pathogenesis of major depressive disorder (MDD) and bipolar disorder (BD). Imbalance between DNA damage and repair is an emerging research area examining pathophysiological mechanisms of these major mood disorders.

**Objectives:** This systematic review sought to examine current evidence on the association between mood disorders and deficits in base excision repair (BER), the primary repair mechanism for repair of oxidation-induced DNA lesions.

**Methods:** We conducted a comprehensive literature search of Ovid MEDLINE® Epub Ahead of Print, Ovid MEDLINE® In-Process & Other Non-Indexed Citations, Ovid MEDLINE® Daily, EMBASE (1947), and PsycINFO for studies investigating the alterations in base excision repair in patients with MDD or BD.

**Results:** A total of 1,364 records were identified. 1,352 records remained after duplicates were removed. 24 records were selected for full-text screening and a remaining 12 articles were included in the qualitative synthesis. SNPs (Single Nucleotide Polymorphisms) of several BER genes have been shown to be associated with MDD and BD. However, it was difficult to draw conclusions from BER gene expression studies due to conflicting findings and the small number of studies.

**Conclusions:** Future studies comparing DNA repair during the manic or depressive episode to remission will give us a better insight regarding the role of DNA repair in mood disorders. These alterations might be utilized as diagnostic and prognostic biomarkers as well as measuring treatment response.

**Disclosure:** No significant relationships.

**Keywords:** major depressive disorder; Oxidative damage; DNA repair; base excision repair

#### EPV0055

### Lithium placental passage at delivery: an observational study

M.L. Imaz<sup>1\*</sup>, L. Garcia-Esteve<sup>1</sup>, M. Torra<sup>2</sup>, D. Soy<sup>3</sup>, K. Langohr<sup>4</sup> and R. Martin-Santos<sup>5</sup>

<sup>1</sup>Hospital Clinic, Unit Of Perinatal Mental Health Clínic-bcn. Department Of Psychiatry And Psychology, Barcelona, Spain; <sup>2</sup>Hospital Clinic, Pharmacology And Toxicology Laboratory, Biochemistry And Molecular Genetics Service, Biomedical Diagnostic Center (cbd), Barcelona, Spain; <sup>3</sup>Hospital Clinic, Division Of Medicines. Department Of Pharmacy, Barcelona, Spain; <sup>4</sup>Universitat Politècnica de Catalunya, Statistics And Operations Research, Barcelona, Spain and <sup>5</sup>Hospital Clinic, Department Of Psychiatry And Psychology, Barcelona, Spain

\*Corresponding author.

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**Introduction:** Lithium is used as a first-line treatment for bipolar disorder during perinatal period. Dosing of lithium can be challenging as a result of pharmacokinetic changes in renal physiology. Frequent monitoring of lithium blood levels during pregnancy is recommended in order remain within the therapeutic window (0.5 to 1.2 mEq/L). Lower neonatal lithium blood level (<0.64 mEq/L) at time of delivery reduces the risk of lithium side effects in the neonate.

**Objectives:** The aim of the present study was to quantify the rate of lithium placental passage in real word.

**Methods:** We included a total of 68 mother-infant pairs for which a lithium measurement was performed intrapartum. Lithium serum concentrations were determined by means of an AVL 9180 electrolyte analyzer. The limit of quantification (LoQ) was 0.20 mEq/L and detection limit was 0.10 mEq/L. Pearson analyse was performer to assess the correlation between mother and umbilical cord lithium serum concentrations.

**Results:** The mean of umbilical cord serum concentration at delivery was 0.57 mEq/L (SD=0.26, range 0,20-1,42). The mean infant-mother lithium ratio at delivery for the 68 pairs was 1.12 (SD=0.24) across a wide range of maternal concentrations (range 0.14-1,40 mEq/L). There was a strong positive correlation between maternal and umbilical cord lithium blood levels (Pearson correlation coefficient 0.948, p<0.001).

**Conclusions:** Lithium demonstrates complete placental passage. This finding is consistent with the results of others studies (Newport 2005; Molenaar 2021).

**Disclosure:** No significant relationships.

**Keywords:** Placental passage; Mother-infant pair; Lithium blood levels; Delivery

## EPV0057

### The effects of lithium and inflammation on the atherosclerosis of older bipolar patients at high risk for cardiovascular disease

S. Tsai

Taipei Medical University, Psychiatry, Taipei, Taiwan  
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**Introduction:** Atherosclerosis can result in serious cardiovascular disease (CVD) and is associated with inflammation and psychopharmacological treatment in bipolar disorder.

**Objectives:** We attempt to investigate the effects of lithium and inflammation on the atherosclerotic development in older bipolar adults at high risk for cardiovascular disease.

**Methods:** The euthymic out-patients with bipolar I disorder aged over 45 years and concurrent endocrine or cardiovascular disease were recruited to measure their bilateral carotid intima media thickness (CIMT) and circulating levels of lithium, valproate, sTNF-R1, sIL-6R, and lipid profile. All clinical information were obtained by directly interviewing patients and reviewing all medical records.

**Results:** Forty eight patients with mean 48.3 years old and mean 27.2 years of age at illness onset were recruited. After controlling for the body mass index, multivariate regression analyses showed that older age, lower lithium level, and higher plasma sTNF-R1 level were associated with higher CIMT and collectively accounting for 33.1% of the variance in CIMT. Blood level of low density lipid or valproate has none relationship with CIMT.

**Conclusions:** Lithium treatment may protect older bipolar patient, even those at high risk for CVD, from atherosclerotic development. Furthermore, persistent inflammatory activation, particularly macrophage activation, may be associated with the accelerating development of atherosclerosis.

**Disclosure:** No significant relationships.

**Keywords:** Lithium; atherosclerosis; older bipolar patients; inflammation

## EPV0058

### Clinical Correlates of Cardiac Conduction in Bipolar Disorder

M. Prieto<sup>1,2\*</sup>, A. Carocca<sup>1,2</sup>, C. Fullerton<sup>1,2</sup>, A. Hidalgo<sup>1</sup>, J. Diaz<sup>1</sup>, P. San Martin<sup>3</sup>, M. Godoy<sup>4</sup>, M. Nuño<sup>1</sup>, A. De Leon<sup>5</sup>, J. Rodriguez<sup>2</sup>, R. Sanchez<sup>6</sup>, F. Batiz<sup>7</sup>, A. Castillo<sup>2</sup>, A. Cuellar-Barboza<sup>8</sup>, J. Biernacka<sup>9</sup> and M. Frye<sup>9</sup>

<sup>1</sup>Universidad de los Andes, Department Of Psychiatry, Santiago, Chile; <sup>2</sup>Clinica Universidad de los Andes, Mental Health Service, Santiago, Chile; <sup>3</sup>Universidad de los Andes, Vicedecanate For Research, Santiago, Chile; <sup>4</sup>Universidad de Chile, Demre, Santiago, Chile; <sup>5</sup>Clinica Universidad de los Andes, Center For Cardiovascular Disease, Santiago, Chile; <sup>6</sup>Private Practice, N/a, Santiago, Chile; <sup>7</sup>Universidad de

los Andes, Ciib, Santiago, Chile; <sup>8</sup>Universidad Autonoma de Nuevo Leon, Department Of Psychiatry, Monterrey, Mexico and <sup>9</sup>Mayo Clinic, Psychiatry, Rochester, United States of America  
\*Corresponding author.

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**Introduction:** Patients with bipolar disorder (BD) have an increased risk for cardiovascular morbimortality. Clinical risk factors, specifically for arrhythmias and sudden cardiac death remain understudied.  
**Objectives:** This study was conducted to assess differences in cardiac conduction among BD patients.

**Methods:** We included patients with BD in a cross-sectional design, confirmed by structured interview, age 18 through 80. Clinical characteristics were obtained using a structured questionnaire or medical records review. ECG intervals duration and morphology were manually assessed by cardiologists and compared among clinical subgroups using Chi-square, Mann-Whitney, and Kruskal-Wallis tests. Exploratory multivariable linear and logistic regression models were fitted to adjust for potential confounders.

**Results:** We included 117 patients (60.7% women, 76.9% bipolar I, 50% history of psychosis, 22.6% suicide attempts). We found a significantly longer QTc interval in BD patients with hypertension (difference: 9.5 ms,  $p=0.006$ ), obesity (difference: 25 ms,  $p=0.001$ ), and metabolic syndrome (difference: 13 ms,  $p=0.007$ ). Hypertension remained a significant predictor of longer QTc after adjusting for age, gender, and antipsychotic use (estimate 17.718,  $p=0.018$ ). We observed a significantly shorter PR interval in women (difference: 6 ms,  $p=0.029$ ), early age of onset (difference 6 ms,  $p=0.025$ ), non-users of lithium (difference 4 ms,  $p=0.002$ ), and early trauma (difference 4 ms,  $p=0.038$ ). Finally, we identified significant correlations between symptom severity, blood glucose and PR interval ( $r=0.298$ ,  $p=0.001$ ;  $r=0.278$ ,  $p=0.003$ ; respectively).

**Conclusions:** Patients with BD and hypertension may have an increased risk for QTc prolongation. Careful cardiovascular monitoring may be warranted.

**Disclosure:** No significant relationships.

**Keywords:** cardiovascular disease; electrocardiogram; QTc; bipolar disorder

## EPV0059

### Childhood trauma and comorbid anxiety disorders in patients with bipolar disorder

D. Bougacha<sup>1\*</sup>, S. Ellouze<sup>2</sup>, R. Jenhani<sup>1</sup> and R. Ghachem<sup>1</sup>

<sup>1</sup>Razi hospital, B, Manouba, Tunisia and <sup>2</sup>Hedi Chaker University Hospital, Psychiatry, Sfax, Tunisia

\*Corresponding author.

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**Introduction:** A history of childhood trauma and Comorbid anxiety disorders have each been identified as potential predictors of unfavorable outcomes in patients with bipolar disorder. Nevertheless, the relationship between these two prognostic features has been little studied.

**Objectives:** In the present study, we aim to explore the relationship between childhood trauma and comorbid anxiety disorders in bipolar patients.

**Methods:** We conducted a cross-sectional, descriptive, and analytical study. Sixty-one euthymic patients with bipolar disorder were recruited in the department of psychiatry B of Razi Hospital, during