

incorrect treatment for their diseases. This will change the game for the management of patients.

Disclosure: No significant relationships.

Keywords: RNA editing; Blood biomarker; diagnosis; bipolar disorder

O009

Lithium treatment and estimate glomerular filtration rate in bipolar disorder patients: A cross-sectional study

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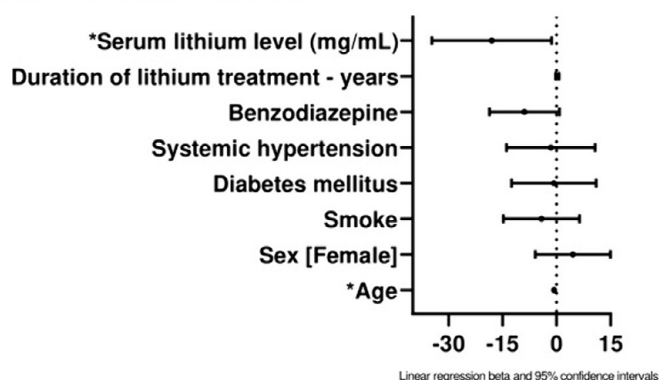
Introduction: Lithium has been the mainstay therapy for bipolar disorder (BD) for decades, but there is little consensus regarding its possible effects on kidney function and the rate of change in estimated glomerular flow rate (eGFR) over time.

Objectives: To describe patients with BD regarding their renal function and their sociodemographic and clinical characteristics potentially related to eGFR.

Methods: This is a cross-sectional study with an initial sample of 95 patients with BD. Multiple linear regression analysis was applied to investigate the association of lithium serum levels and their duration of treatment with eGFR, independent of confounding factors. We excluded patients without data regarding any of the variables from the final model.

Results: In the multivariate analysis, the model was composed of eight variables (Figure 1). The mean duration of treatment was 10 years (Figure 2). Serum lithium level was associated with low levels of eGFR ($\beta = -18.06$ [-34.70 - -1.42], $p = 0.03$); among the other variables, only age remained associated with it ($\beta = -0.72$ [-1.10 - -0.33], $p = <0.01$).

Figure 1 – Forest plot of multivariate analysis



Note: ^{*}P<0.05

Figure 2: Description of the study sample

Age (years) - median (IIQ)	49.0 (37.0— 57.5)
Female - n (%)	76 (80.0)
Race	
White	20 (21.1%)
Black	75 (78.9%)
BMI - median (IIQ)	28.4 (24.2—32.8)
Smoke - n (%)	20 (21.1)
Systemic hypertension - n (%)	11 (11.6)
Diabetes Mellitus - n (%)	14 (14.7)
Dyslipidemia - n (%)	10 (10.5)
Antipsychotic use - n (%)	67 (70.5)
Anticonvulsant use - n (%)	53 (55.8)
Benzodiazepine use - n (%)	21 (22.1)
BD Types	
BD type I	85 (89.5%)
BD type II	10 (10.5%)
Serum lithium levels (mg/ml)* - median (IIQ)	0.7 (0.6—0.9)
Lithium treatment duration - years	10.0 (6.0—16.0)
Daily lithium dosis	900.0 (900.0— 1200.0)
Serum urea	25.0 (21.0—29.5)
Serum creatinine	0.8 (0.7— 1.0)

^{*}Only 83 patients

Conclusions: We replicated the correlation between serum lithium levels and eGFR. Our results contradict the claim that duration of treatment with lithium correlates with lower levels of eGFR, while suggesting serum lithium level could be a possible early marker of lithium nephrotoxicity.

Disclosure: No significant relationships.

Keywords: bipolar disorder; serum lithium level; lithium; nephrotoxicity

O010

Prospective early warning signals to detect transitions to manic and depressive episodes in bipolar disorder

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Introduction: For patients with bipolar disorder, early recognition of impending mood episodes is crucial to enable timely intervention. Longitudinal digital mood monitoring using ecological momentary assessment (EMA) enable prospective study of early warning signals (EWS) in momentary affective states prior to symptom transitions.

Objectives: The present study examined in a unique longitudinal EMA data set whether EWS prospectively signal transitions to manic or depressive episodes.

Methods: Twenty bipolar type I/II patients completed EMA questionnaires five times a day for four months (average 491 observations per person), as well as weekly symptom questionnaires concerning depressive (Quick Inventory for Depressive