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Efficacy of Treating Late-Life Bipolar Disorder with Right Unilateral Electroconvulsive Therapy

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Background

- Bipolar Disorder (BPAD) is a disabling illness in the elderly and is often treatment-resistant
- Electroconvulsive therapy (ECT) is an effective treatment for all phases of BPAD, though only a few studies have focused on bipolar disorder in the geriatric population¹⁻²
- Right unilateral (RUL) ECT is a focal modality associated with reduced cognitive side effects, faster response rates, and equivalent efficacy in comparison to bitemporal (BT) placement³⁻⁴
- In this poster, we report efficacy and safety data from a retrospective chart review of individuals receiving RUL ECT to treat late-life BPAD

Methods

- A retrospective chart review was conducted of patients age 55 or older with any symptomatic presentation of late-life BPAD who received either Brief RUL or Ultrabrief RUL (UBRUL) ECT treatments
- Symptomatic response was measured using pre- and post-ECT Quick Inventory of Depressive Symptomatology (QIDS) and Beck Depression Inventory (BDI) scores
- Clinical improvement and cognitive change were measured using Clinical Global Impression improvement (CGI-I) and Electroconvulsive Cognitive Assessment (EcCA) scores

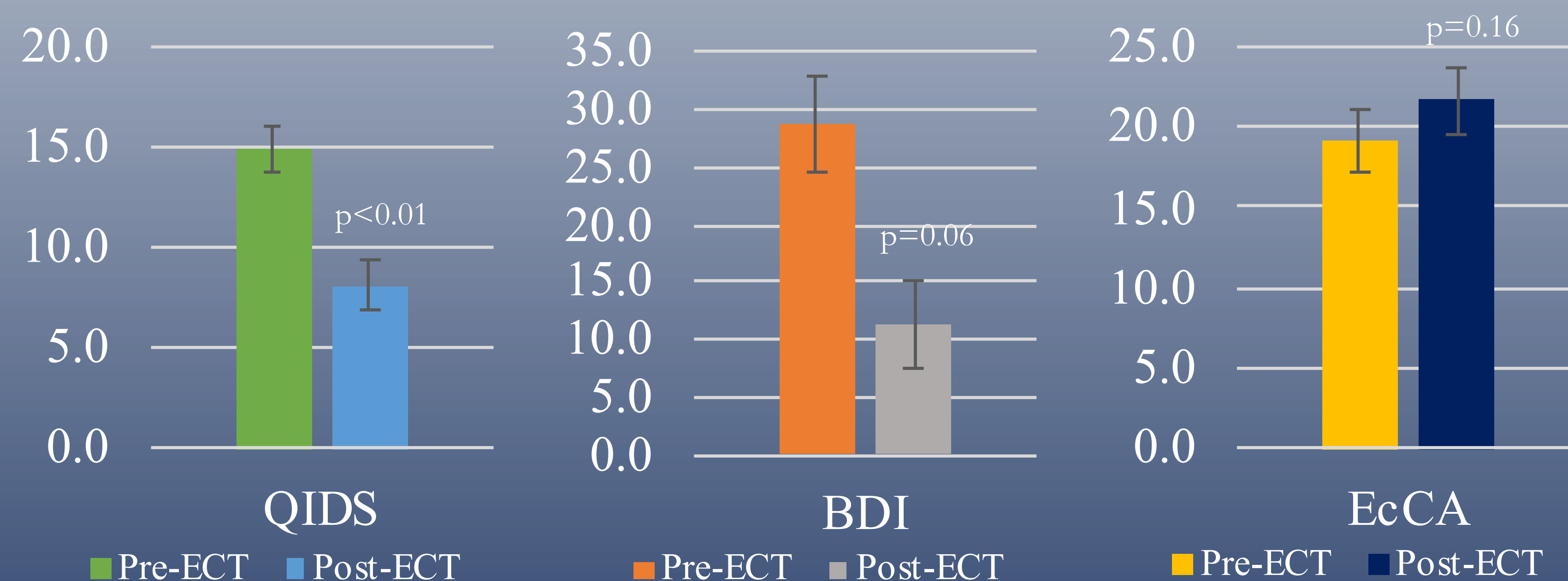
Results

- Forty elderly patients (28 women and 12 men, mean age 68.9 ± 7.1 years) were included in the analysis
- 60.6% of patients showed $\geq 50\%$ improvement and 51.5% achieved remission of ≤ 5 in QIDS scores (n = 33)
- 66.7% demonstrated $\geq 50\%$ improvement and 50% achieved remission of ≤ 12 in BDI scores (n = 6)
- Average QIDS score was reduced by a statistically significant 46.2% (two-tailed, paired p-value < 0.01) after ECT
- 67.6% of patients attained a score of “much improved” or better in CGI-I (n = 37) and 35.1% achieved remission. 50% of patients saw $\geq 50\%$ improvement in EcCA scores (n = 6)

TABLE 1. Response and Remission Rates in Mood, Clinical Status, and Cognitive Scores for Patients with Late-Life BPAD Undergoing RUL ECT

	n =	% Total
QIDS	33	
Response ($\geq 50\%$ reduction)	20	60.6%
Remission (≤ 5)	17	51.5%
BDI	6	
Response ($\geq 50\%$ reduction)	4	66.7%
Remission (≤ 12)	3	50.0%
CGI-I	37	
Response (≤ 2)	25	67.6%
Remission (1)	13	35.1%
EcCA	6	
$\geq 20\%$ Improvement	3	50.0%

FIGURE 1. Change in average pre- and post-ECT scores for mood and cognitive status metrics for patients with late-life bipolar disorder undergoing RUL ECT



Average pre- and post-ECT scores for mood (QIDS and BDI) and cognitive status (EcCA) for patients with late-life bipolar disorder undergoing RUL ECT. Standard error lines are displayed. Two-tailed, paired t-tests were used to calculate p-values.

Conclusion

- This retrospective chart review supports the use of RUL ECT as a safe and effective treatment for late-life BPAD
- Our data demonstrate an improvement in depressive symptoms and stable clinical status with the use of brief RUL and UBRUL ECT techniques
- Additional studies will benefit from inclusion of objective metrics regarding manic symptoms, cognitive status and function, and possible interference of concomitant medications
- The utility of RUL ECT as continuation and maintenance treatment of late-life BPAD should also be explored

References

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