

Changes in depression, anxiety, anger, and personality after respective surgery for drug-resistant temporal lobe epilepsy: A2-year follow-up study

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Summary

Objective: To further elucidate the psychiatric outcome of surgical treatment for temporal lobe epilepsy (TLE).

Methods: Fifty-two consecutive patients with drug-resistant TLE and IQ \geq 70 completed the Minnesota Multiphasic Personality Inventory, Beck Depression Inventory, Spielberger State-Trait Anxiety Inventory, and Spielberger State-Trait Anger Expression Inventory before epilepsy surgery, after 1 year, and after 2 years. Some patients also completed the 31-item Quality of Life in Epilepsy (N=29) and WHOQOL-100 (N=24) questionnaires. During the follow-up period, patients were maintained on a stable medication regimen. Multivariate repeated measures analysis of variance was used to examine changes in psychiatric variables over time.

Results: Seizure outcome was excellent (89% in Engel class I after 2 years). There were only a few significant changes over time in the MMPI profile, suggesting a decrease in interpersonal sensitivity, irritability, and social introversion. Anxiety decreased significantly with a gradual decline, anger dropped significantly after remaining basically flat during the first year, while depression showed a gradual but non-significant decline. Younger age and shorter duration of epilepsy were associated with greater improvement in several anger dimensions. In the patient subgroup with quality of life data available, greater improvement in overall quality of life and key life domains (income, work capacity, personal relationships) was found to be associated with greater decrease in depression, anxiety, and anger.

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