

Quality of life after resective surgery for intractable mesial temporal lobe epilepsy and neocortical epilepsy

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Background and Objective: Intractable epilepsy patients have multiple handicaps which are associated with the epilepsy itself or with etiologies of epilepsy. In general, the clinical manifestations of mesial temporal epilepsy (mTLE) is known to be involved in learning, memory, long-term storage of experiences as well as regulations of emotions as the complicated functional structures of temporal lobe, including limbic system. mTLE is quite intractable to antiepileptic drugs (AEDs) and is acceptable to surgical resections for its better outcome. Neocortical epilepsy (NCE), however, involves more variable and more subtle abnormality than mTLE and its outcome is different from MTLE. The aim of epilepsy surgery is to control seizures and improve the quality of life at work or at school and patient development. We evaluated the effects of epilepsy surgery on patients' quality of life (QOL) comparing mTLE and NCE.

Methods: Eighty-seven consecutive patients including 48 with mTLE and 39 with NCE who responded to a survey were studied. Average age at surgery was 29.4 years in mTLE and 27.4 years in NCE patients. Follow-up period was 5.0 years on average. Seizure outcome was Engel's class I in 77.0%, II in 12.6%, III in 8.0%, IV in 2.3% for mTLE; and I in 66.7%, II in 15.4%, III in 12.8%, IV in 5.1% for NCE. Questionnaires included general evaluation, seizure outcome, range of activity, friends, mental state income, memory and language, physical state, and daily life for the both patients groups, and general evaluation, life attitude, school, friend, mental state, range of activity and family state for the both family groups of the patients. They were scored using a visual analog scale by both patients and family.

Results: Degree of satisfaction was highest for seizure outcome (93% in patients, 100% in family for mTLE; 78.9% in patients, 86.5% in family for NCE), and lowest for income and memory/language (income; 50.0% in patients, 85.7% in family for mTLE; 42.9% in patients, 75.0% in family for NCE). Full-time work was achieved in 43.8% of mTLE and 43.6% of NCE patients. Major factors for unsatisfactory results were social maladjustment in mTLE and seizure remnant in NCE.

Discussion and Conclusion: Satisfactory QOL can be achieved both in mTLE and NCE patients with surgical resection. However some mTLE patients are not satisfied with income and memory/language. The seizure disorder is seldom the single or main factor in the determination of mental handicap. The patients have been handicapped physically and mentally for long time and cannot get better social prognosis after operation. We believe that they cannot adapt because of social and behaviour difficulties. We thought that early surgical intervention should be done for hoping better social adaptation.

References

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