Surgery for refractory mesial temporal lobe epilepsy: prognostic factors and early, rather than late, intervention

Cirurgia para epilepsia de lobo temporal mesial: fatores prognósticos e intervenção precoce melhor que tardia

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Mesial temporal lobe epilepsy (MTLE) is the most prevalent refractory epilepsy in adolescents and adults, and its pathologic hallmark is classic hippocampal sclerosis. There is the strongest level of evidence (Level A) to indicate surgical treatment for refractory unilateral MTLE.

The study presented by Jardim et al. is important because it confirms the relationship between prognostic factors of surgery for unilateral MTLE and the pathologic findings. The best postoperative seizure control (i.e. Engel class 1) was associated with classic and severe patterns of hippocampal sclerosis (types 1a and 1b, respectively), as well as the presence of an initial precipitating injury. The three patients with normal hippocampal findings were associated with poor outcome. This point is still controversial in the literature. In general, outcome is poorer in patients without hippocampal neuronal cell loss (no hippocampal sclerosis).

Nowadays, modern imaging with resonance techniques offers a very useful and safe way to check this point.

The study also reassures in that more than two thirds of the patients became seizure free for at least six months, which is considered a short follow-up. This outcome is compatible with the literature and it is considered a very successful outcome.

The concept of a medical refractory epilepsy patient is defined as the failure of adequate trials of two tolerated, appropriately chosen and used, antiepileptic drug schedules (either as monotherapies or in combination) to achieve sustained seizure freedom. Therefore, it is possible to make the diagnosis of refractory MTLE relatively quickly.

Unfortunately, patients are operated on after 20 years of seizures, as confirmed by data in the article by Jardim et al.. This astonishing fact occurs not only in Brazil, but also in other organized countries, such as the USA.

A recent study has shown that early referral for surgery is tremendously advantageous for the patients in order to avoid irreversible, disabling social, and psychological consequences of recurrent seizures, as well as minimizing the risk of premature death.

We do hope that our fellow neurologists are aware of this important information and that all patients with refractory epilepsy are referred to an epilepsy center to determine if they might be candidates for surgery.

References