

Revolutionary well succeed surgery for epilepsy ten years later

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Backgrounds: Roughly 2 % of the Brazilian population is suffering from active epilepsy. Most of them are symptomatic and cysticercosis, head trauma, and febrile convulsion in the childhood are the main etiologies. Nearly 20% of them seizures are uncontrolled by proper usage of antiepileptic drugs (AEDs) and surgical treatment should be considered as option. Surgery to the treatment of refractory epilepsy began in 1886 by Victor Horsley. Since then this alternative has continuously improved. It is remarkable to notice that in medically intractable temporal lobe epilepsy with mesial temporal sclerosis (MTS), surgical removal of the epileptogenic zone leads to seizure remission in 70-80% of patients. In other types of localization-related epilepsies, surgical outcome is less favorable, with remission rates from 30 to 45%. Unfortunately, it may be misused as a new anti-epileptic “panacea”. Financial instead medical details may be under the over indication of this method nowadays.

Methods: A case report describing a patient suffering from severe partial epilepsy submitted to a surgery ten years before.

Case report: SMF, a 36-years-old, right-handed, pensioner, living in Southern Brazil. He developed partial epilepsy at the age of 7, characterized by simple partial motor and complex partial seizures. Secondary generalized fits were also quite common. EEG had demonstrated epileptiform discharges in the right temporal areas. He was started on monotherapy with major AED and his seizures became under control. However few months later he developed refractory epilepsy unresponsive to diverse AEDs trials including polytherapy regimen. When he was ten years old a surgery was performed due to a “benign right parietal lobe lesion” showed by CT scan and recognized as the etiology. Despite of surgery his epilepsy remained active. When he was 18 years old he was assessed in epilepsy clinic and again was introduced in monotherapy regimen with a major AED. Surprisingly he became seizure-free for roughly three years and got a university degree at this time. Afterwards he developed tolerance to AEDs and epilepsy became refractory again. Simple and complex partial seizures daily and secondarily generalized tonic-clonic in a monthly basis. Routine EEGs demonstrated bilateral temporal discharges and presumably there was no predominant side. A new surgical intervention was suggested at this time, and in fact when he was 24 years old a “revolutionary surgery” was performed.

Brazilian television audience was astonished when the speaker announced the “cure of epilepsy” by a “new surgery in which the patient remains alert and collaborative”. Although his epilepsy remained very active; the institution, however, increased its reputation. Actually the SMF clinical situation is deteriorating after the last surgery, memory and cognitive dysfunctions became a real trouble to him.

Discussion: We described a young patient suffering from partial symptomatic epilepsy refractory to AEDs submitted to a surgical intervention. Applying the diagnostic criteria suggested to identify a medical intractability that include an adequate trial with 4 first-line AEDs, some with a 2-drug therapy, associated to satisfied life, we had no doubt about this diagnosis in this patient. But we questioned if he really was an adequate person for surgical approach. He presented many EEG studies before the last surgery showing bilateral discharges. One main reason for ruling out surgery is an inadequately localizing ictal onset. Every medical and surgical treatment has the potentiality to provoke undesirable side effects. As persons are different from each other, the benefit/risk ratio needs to be assessed in an individual basis.

Disgracefully the propaganda on successful surgical treatment for epilepsy to the general population has strong impact and people are looking for this as a new panacea. Every one should be concerned about the repercussion of this misinformation. By the way is notable to notice that nobody back to the television to give an outcome of the patient SMF. On the other hand we believe there is an urgent need for prospective studies to assess long-term outcome, and outcome predictors, in patients with localization-related epilepsy, whether managed by surgery or not. Finally doctors should be precautious regarding their relationship with mass media corporations and even more careful in order to avoid improper indication of epilepsy surgery. How little we know about long-term outcome in this kind of surgery, we must be attend to the real medical indication. Robert Frederick Loeb (1895—1971) was a brilliant professor of Medicine at Columbia University in New York, and his career spanned 52 years. From 1951 to 1959, Loeb further extended his pedagogic influence by co-editing, with R. L. Cecil, "A Textbook of Medicine," presiding over three editions. Dr. Loeb, had three fundamental rules for the use of drugs and exercise Medicine, that we suggest to doctors keep on mind. First, if a drug is working, keep it up. Second, if a drug is not working, stop it. Always identify something objective and specific to follow. And the corollary: if you cannot find anything to follow, then do not treat with drugs or surgery.

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