PET, neuronavigation, stereotaxis, B ultrasonic, three dimensional positioning, video-EEG, ECoG, deep-EEG. Function areas located by embedded steel, awake surgery, electric cortical stimulation in operation. Technical of operation include resection of focus at bottom of sulus, half of gyrus resection, undermined resection of focus, hollowed-out work et al.

Result: We did operations of rolandic epilepsy, use the technologies include accurate structure location, exact functional location and fine resection operation, our operation effective in treatment of epilepsy and well favorable protect function of rolandic areas.

Conclusion: Accurate structure location, exact functional location, fine resection operation is effective surgical treatment method of rolandic epilepsy.

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Simple yet reliable pre-surgical evaluation for TLE in countries with limited resources, based on experience on 450 TLE cases

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Background: Despite the availability of modern antiepileptic drugs (AEDs), up to 30–40% of epilepsy patients continue to have seizures and half of these are potential candidates for surgery. Epilepsy surgery (ES) is recommended for temporal lobe epilepsy (TLE), which is possibly the most common form of human epilepsy and the most refractory to AEDs. In TLE, the surgical procedure is a standardized anterior temporal lobectomy (ATL) including amygdalo-hippocampectomy, or selective amygdalo-hippocampectomy (SAH). So that all pre-surgical evaluation is aimed to finding the epileptic temporal side.

Methods: Based on our experience on surgery of 450 TLE cases, pre-surgical evaluations are grouped into 1 – simple (based only on semiology and the presence of unilateral temporal or hippocampal abnormality), 2 – difficult (long-term ictal EEG and/or FDG-PET evaluation is needed), and 3 – complex (invasive subdural EEG is needed). These groups of pre-surgical work-up are evaluated in relation to the results of surgery, evaluated after at least 12 months follow-up.

Results: There were more than 50% patients in Group 1 (simple work-up), and the result showed that even based on seizure semiology and MRI only, seizure free (SF) rate reached more than 70% cases and comparable with those TLE cases needed more difficult or even complex pre-surgical work-up.

Conclusion: There are many countries with limited resources with so many intractable TLE cases which may go directly into ES after simple yet reliable pre-surgical evaluation. Understanding the limitation and good patient selection criteria are important so that Epilepsy Surgery may be started in many areas with limited resources.

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Selective amigdalo-hippocampectomy, How I do it

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Based on our experience on around 100 cases of selective amigdalo-hyppocampectomy (SAH), there are several important steps to reach good results and at the same time avoiding surgical complications.

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