Anterior Mesial Temporal Lobectomy (AMTL) - Tips For Beginners

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AMTL has been proven to be an effective treatment for temporal lobe epilepsy (TLE). The seizure freedom rate in patient with refractory epilepsy following AMTL is as high as 75%. In properly selected patients, AMTL provide curative and dramatic change in term of quality of life. The surgical procedure requires fundamental knowledge of the temporal structures in relation with its function. As the neural structures are almost similar in terms of its colors and consistency, also are different among individuals; surgeon will be depending on the certain fixed structures, measurements and shapes of the tissues as a guide during surgery. Temporal lobe is also a compact brain structures with many area important for human function. Resection of epileptogenic tissue at this area requires 3D understanding of the anatomy, skill and training. Too little or too much resection of epiletogenic tissue will result in unfavorable outcome or complications. Destruction or injury to normal unseen functioning structures may produce many unwanted side effects.
This topic aim is to share some useful tips and experiences in the technique of AMTL. Hopefully these information can benefit all neurosurgeon especially those who are interested to pursue further in epilepsy surgery.