

Chapter 16

Epilepsy



Seizures are sometimes caused by a discrete brain lesion, the removal of which may eliminate the seizures. Also, there are now many seizure medicines that are very effective and well-tolerated. Levetiracetam/Keppra is often used now as the first line medical treatment for seizures. Levetiracetam and lamotrigine are considered to be two of the safest anti-seizure medicines for use during pregnancy. “Epilepsy surgery” usually refers to surgery for seizures in which there is no clear anatomical brain lesion causing the seizures and the seizures are refractory to medicines. The need for such surgery is rare. Various surface and internal electrodes may help localize the seizure focus. The most common type of surgery is for mesial temporal lobe epilepsy (MTLE), in which the mesial temporal lobe is demonstrated to be the cause of the seizures. These patients can be treated with either temporal lobectomy [89] or laser interstitial thermal therapy (LITT) [90]. Other seizure foci beside the temporal lobe can also sometimes be targeted for excision if they are in non-eloquent regions of the brain.