

EPILEPSY SURGERY SHOULD NOT BE PERFORMED IN PATIENTS WITH STRUCTURAL LESIONS EVEN IF SEIZURES ARE CONTROLLED BY MEDICATION

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Resection of structural lesions should be reserved for patients whose seizures fail to respond to antiepileptic medication. There are several reasons for this approach. First, there is no assurance that surgery will result in permanent seizure remission and that patients will be able to stop their medications. Moreover, after prolonged remission with medical treatment, successful medication taper can often be initiated; therefore, medication might be stopped with or without surgery. In addition, surgery creates a new structural lesion which may become epileptogenic; hence the operation may cause the development of epileptogenic focus which may not be controlled by medication. Surgery could therefore paradoxically worsen seizure control. Surgery also poses greater risk than medical therapy. Patients who have well controlled epilepsy have no greater risk of injury or death than the general population. Surgery, on the other hand, poses some risk, even though it is small. General risks include death, stroke, and infection. Excision of a structural lesion in some regions can cause neurological deficits; for example, excision of a temporal lesion in the language-dominant hemisphere can result in impairment of verbal memory. Additionally, many lesions are not progressive, such as dysplasias and hamartomas, and never require excision. Therefore, it is usually preferable to treat such patients medically, observing the lesion with serial MRI scans, as long as seizure remain controlled and the lesion is unchanged in size.