Role of Neuroimaging in Epilepsy

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Abstract

Epilepsy is a common and disabling neurological disorder initiated by the unpredictable EEG electrical discharges within the brain. Epilepsy management is most effective when the onset zone of the seizures can be exactly localized within the brain. Imaging is crucial in the evaluation and management of patients with epilepsy. MRI is the preferred imaging method for patients with seizures. Detection of structural abnormalities during preoperative investigations requires a dedicated epilepsy protocol for MRI studies. Sensitivity of MRI to find the localization of seizure onset zone has been improved by more advanced MRI technologies in recent years. Neuroimaging is central to the management of patients with medically refractory epilepsy and that play a crucial role for surgically resection process of epileptogenic zone.

Keywords: Epilepsy, MRI, EEG, Neuroimaging.

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