

## **Epilepsy And Seizure Disorders: Multimodal Imaging Approach**

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Epilepsy is a chronic disabling neurological condition and comprehensive multidisciplinary management is crucial in establishing the success of epilepsy care. Tremendous progress has been made in the field of epilepsy neuroimaging in the last decade. The advent of improved high field strength MRI and revolutionized functional MR imaging gave rise to essential clinical applications in understanding the anatomic and functional brain disturbances related to complex epilepsy and seizure disorders.

Imaging plays an important role in the locating and defining anatomic epileptogenic abnormalities, particularly in patients with medically refractory epilepsy. Identification of the epileptogenic zone/lesion is of paramount importance in refractory epilepsy as adequate surgical intervention improves the clinical outcome. The aim of this article is to present an overview of the current MRI, fusion SPECT and PET examinations with special emphasis of imaging abnormalities and treatment options. Optimisations of epilepsy imaging protocols are addressed, imaging pitfalls and multi modality approach as seen in our practices are presented.