

## **Imaging in Epilepsy**

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Management of epilepsy is a team effort. The role of the neuroradiologist is to detect and diagnose abnormalities in the brain of epilepsy patients, and to guide surgical procedures.

Magnetic resonance imaging (MRI) is more sensitive and more specific than any other imaging technique for epilepsy related pathology.

It has been demonstrated that standard screening techniques using standard sequence parameters and short imaging time has limited use in patients with intractable chronic epilepsy because the pathology to be detected is often subtle and can only be found by using optimized imaging protocols with much longer imaging time.

The pathology found in epilepsy patients is diverse, but in intractable chronic epilepsy, hippocampal sclerosis, malformations of cortical development and tumors are the most frequently found pathological entities.

Diagnostic information of more than 10 years experience in epilepsy imaging will be demonstrated.

Patients referred for presurgical work-up also benefit from functional MRI. Using relative straight forward language paradigm's and one simple and one less simple memory paradigm, fMRI gives in most cases the same information as the invasive WADA test concerning the surgical risks involved.