

HFOs in Brno Epilepsy Center

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Brno Epilepsy Center is providing epilepsy surgery program since 1995. Invasive presurgical EEG is mostly performed using orthogonally implanted depth electrodes and advanced analyses of intracranial EEG signal are carried through long run collaboration of Department of Neurology, ISI, ICRC and CEITEC. Besides standard four-bed video EEG monitoring unit the research facility disposes of Faraday cage to record very high-quality signals. Since 2011, high frequency (25 kHz) and high dynamic (24-bit) intracranial EEGs were recorded in 43 consecutive epilepsy patients to analyze HFOs beyond standard limits. The results of manual and automated HFO detection and multidimensional visualization will be presented.