

New hybrid micro-macroelectrodes to record fast ripples in patients with drug-refractory epilepsy

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We have been running the EpiFar study since March 2015 to assess the performance of new depth hybrid micro-macroelectrodes provided by DIXI-medical. Each consists of several macrocontacts (same as those used in routine clinical practice) and 2 or 3 tetrodes (4 microwires - 20µm diameter). Our first aim was to demonstrate that these microelectrodes allow to record fast-ripples (FRs).

Preliminary results in 7 patients are promising: FRs are recorded with the microelectrodes, more often than with the macrocontacts as suggested in the literature. Our current experience with these FRs will be presented.