Clinical application of magnetic stimulation of focal epilepsy patients.

Summary / Zusammenfassung
The aim of this project is to further assess the effects of weak-field magnetic stimulation on brain electrical activity in epilepsy patients. Patients suffering from mesial temporal lobe epilepsy (MTLE) are exposed to DC magnetic fields of 0.9 and 1.8 millitesla (mT). The EEG activity is recorded simultaneously from intracranial electrodes inserted through the foramen ovale (FO) and scalp electrodes. A preliminary study in MTLE patients showed a significant enhancement of interictal epileptiform activity in more than fifty percent of patients and a cessation of interictal spike/wave trains in one patient.

Publications / Publikationen

Keywords / Suchbegriffe
epilepsy, magnetic stimulation, low frequency, ferromagnetic induction

Project Leadership and Contacts / Projektleitung und Kontakte
Prof. H.G. Wieser (Project Leader)  hgw@nos.usz.ch
Prof. J. Dobson jdobson@keele.ac.uk

Funding Source(s) / Unterstützt durch
SNF (Project Number : 3100-067251)

Duration of Project / Projektdauer
Sep 2002 to Sep 2004