

Prospects for Non-Invasive Brain Stimulation in Epilepsy

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Noninvasive brain stimulation methods are emerging as diagnostic and therapeutic tools in epilepsy. Two among these, transcranial magnetic stimulation (TMS) and transcranial direct current stimulation (tDCS) already have appreciable preclinical and clinical data to support their deployment either in large trials, or in day-to-day patient management. This lecture will focus on summarizing the basic neurobiology of TMS and tDCS, and will review their application in clinical and experimental epilepsy. Specific topics will include measures of cortical function and cortical excitability by TMS, seizure suppression by TMS and tDCS, and logical drug-device coupling.