Stroke

Most of all during rehabilitation, rTMS gains growing importance

Studies proof improvement von balance disturbances, visual neglect, motor skills, paresis and spasticity as well as speech disturbances. Reactive depressions can be treated as well. Most of all rTMS can help, when damaged tissue is within deeper regions of the brain. It has been shown, that rTMS may help also up to 14 years after a brain attack and can stimulate plasticity.

Initial treatment can be performed at the outpatient practice of Dr. Seemann in form of an intensive 2 - 4 week treatment, with rTMS sessions each day.

In cooperation with a day clinic in Munich for regenerative medicine we do recommend a combination with stem cells therapy.

Studies concerning rTMS and stroke

- The effects of 10-Hz repetitive transcranial magnetic stimulation on depression in chronic stroke-patients
- The effect of low-frequency repetitive transcranial magnetic stimulation (rTMS) on the treatment of aphasia caused by cerebrovascular accident (CVA)
- Effects of different frequencies of repetitive transcranial magnetic stimulation in stroke patients with non-fluent aphasia: a randomized, sham-controlled study
- Effects of combining high- and low-frequency repetitive transcranial magnetic stimulation on upper limb hemiparesis in the early phase of stroke
- Low-frequency repetitive transcranial magnetic stimulation for stroke-induced upper limb motor deficit: a meta-analysis
- Further evidence of the positive influence of repetitive transcranial magnetic stimulation on speech and language in patients with aphasia after stroke: results from a double-blind intervention with sham condition
- The use of repetitive transcranial magnetic stimulation for stroke rehabilitation: a systematic review
- Effectiveness of repetitive transcranial magnetic stimulation (rTMS) after acute stroke: a one-year-longitudinal randomized trial
• Repetitive transcranial magnetic stimulation ameliorates cognitive impairment by enhancing neurogenesis and suppressing apoptosis in the hippocampus in rats with ischemic stroke
• The efficacy of high-frequency repetitive transcranial magnetic stimulation for improving apathy in chronic stroke patients
• Low-frequency repetitive transcranial magnetic stimulation improves motor dysfunction after cerebral stroke
• Effects of 10Hz repetitive transcranial magnetic stimulation of the left dorsolateral prefrontal cortex in disorders of consciousness
• Low-frequency rTMS of the unaffected hemisphere in stroke patients: a systematic review
• Effects of low-frequency repetitive transcranial magnetic stimulation on upper extremity motor recovery and functional outcomes in chronic stroke patients: a randomized controlled trial
• Effects of low-frequency repetitive transcranial magnetic stimulation and neuromuscular electrical stimulation on upper extremity motor recovery in the early period after stroke: a preliminary study
• High-frequency repetitive transcranial magnetic stimulation (rTMS) improves functional recovery by enhancing neurogenesis and activating BDNF/TrkB signaling in ischemic rats
• Dynamics of neuroinflammation in the macrosphere model of arterio-aerterial embolic focal ischemia: an approximation to human stroke patterns
• Effects of repetitive transcranial magnetic stimulation over trunk motor spot on balance function in stroke patients
• Ipsilesional high-frequency repetitive transcranial magnetic stimulation add-on therapy improved diffusion parameters of stroke patients with motor dysfunction: a preliminary DTI study
• The effect of 10-Hz repetitive transcranial magnetic stimulation on depression in chronic stroke patients?
• A sham-controlled trial of 5-day course of repetitive transcranial magnetic stimulation of the unaffected hemisphere in stroke patients