

POST-TREATMENT ASSESSMENT

A follow-up with our inhouse neurologist will be arranged within 2 weeks of the last treatment (if indicated).

During the follow-up visit the following assessments may be completed: Rivermead, DASS-21, and HIT-6.

POTENTIAL SIDE EFFECTS

The main risk factor for rTMS is seizure.

Seizures are mostly self-limiting and treatment is supportive. The risk of seizure with rTMS is less than 1%, which is comparable to psychotropic medications (*Neuropsychiatric Disease and Treatment (TMS and seizure)-2020 lit. review*).

The other adverse effect of rTMS is discomfort during the pulsation, but several studies have shown that rTMS is well tolerated.

A headache is a common side effect, which can be resolved with simple analgesics (pain killers).



CONTACT US

For pricing information, please contact the Brain, Vision and Concussion Clinic.

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Repetitive
Transcranial Magnetic
Stimulation (rTMS) for
Treatment of Different
Conditions

DR. NEDA ANSSARI

BRAIN, VISION AND CONCUSSION CLINIC

WHAT IS REPETITIVE TRANSCRANIAL MAGNETIC STIMULATION (RTMS)?

rTMS is a noninvasive method for stimulating nerve cells in superficial areas of the brain.

Over the last decade numerous studies showed the therapeutic effects of rTMS in treatment of different neurological and psychiatric diseases.

HOW IT WORKS

During an rTMS session, the patient will be comfortably seated for 20-30 minutes. An electromagnetic coil will be placed on the scalp. A series of short magnetic pulses are painlessly delivered to the area of interest.

By changing the firing pattern of neurons in brain circuits the affected brain patterns may change. The brain activity changes are thought to be the mechanism through which treatment occurs.

Typically, 10-40 sessions may be needed depending on the brain condition and the protocol, which can be tailored for any patient.

HOW TO OBTAIN TREATMENT REFERRAL

All patients must have a primary referral (GP, NP, ENT, psychiatrist, neurologist, or optometrist/ophthalmologist) who is responsible for pre-treatment and post-treatment follow ups.

rTMS will be applied under the supervision of a certified neurologist during the treatment period. However, our in-house neurologist is not primarily responsible for diagnosis of the patients and follow-up assessments.

We may provide some pre/post-treatment assessments. If needed, any of the assessment information can be provided to the referrals.

WHAT BRAIN CONDITIONS ARE QUALIFIED FOR RTMS?

We will accept the following brain conditions for rTMS treatment, categorized by efficacy. (*Clin Neurophysiol 2020-Evidence-based guidelines TMS*):

Level A	HF	Neuropathic pain
	HF	Depression
	LF	Hand motor recovery in the post-acute stage of stroke

Level B	HF	Fibromyalgia
	HF	Parkinson's Disease
	ITB	Lower limb spasticity in Multiple Sclerosis
	HF	Post-traumatic Stress Disorder
	LF	Chronic post stroke non-fluent aphasia
	HF	Post-concussion syndrome
	HF	Orofacial central pain

Level C	HF	Alzheimer's
	HF	Addiction and craving
	LF	Tinnitus

TABLE ABBREVIATIONS AND DEFINITIONS

HF: High frequency rTMS

LF: Low frequency rTMS

ITB: Intermittent theta burst

Level A Evidence: Definitely effective

Level B Evidence: Probably effective

Level C Evidence: Possibly effective

PRE-TREATMENT ASSESSMENT

The following forms may be administered :

Rivermead score

DASS-21

HIT-6

The Toronto Cognitive Assessment (ToRCA)