

Appointment Line (Central)
Tel: (65) 6908 2222

Neurology Diagnostic Lab
Kent Ridge Wing, Zone C, C04-05
DID: (65) 6772 4126

My rTMS Dates **Cost:** _____

#1: _____ #13: _____

#2: _____ #14: _____

#3: _____ #15: _____

#4: _____ #16: _____

#5: _____ #17: _____

#6: _____ #18: _____

#7: _____ #19: _____

#8: _____ #20: _____

#9: _____ #21: _____

#10: _____ #22: _____

#11: _____ #23: _____

#12: _____ #24: _____

Reviewed by: _____

Date: _____



The information provided in this publication is meant purely for educational purposes and may not be used as a substitute for medical diagnosis or treatment. You should seek the advice of your doctor or a qualified healthcare provider before starting any treatment or if you have any questions related to your health, physical fitness or medical conditions.

Information is correct at time of printing (January 2022) and subject to revision without prior notice.

Copyright (2022). National University Hospital
All rights reserved. No part of this publication may be reproduced without permission in writing from National University Hospital.

National University Hospital
5 Lower Kent Ridge Road, Singapore 119074
Tel: (65) 6908 2222
Website: www.nuh.com.sg
UEN: 198500843R

Repetitive Transcranial Magnetic Stimulation (rTMS) for Psychiatric Illness

What is rTMS?

rTMS is a brain stimulation technique used to treat psychiatric conditions like major depressive disorder (MDD) and obsessive compulsive disorder (OCD). rTMS targets specific brain regions that are affected by MDD and OCD. The treatment is non-invasive as it uses focal magnetic pulses that passes through the air and skull to activate the underlying brain area.

What are the benefits of rTMS?

Patients suffering from MDD or OCD are usually treated with medications and/or psychotherapy. However, these standard treatments may not work for all patients, hence rTMS is available as an alternative form of treatment. rTMS can be used on its own or together with existing treatment (such as medication or psychotherapy).

Clinical studies have shown that rTMS is able to reduce the severity of symptoms in patients with MDD or OCD, especially **those** who have not adequately responded to standard forms of treatment. Research has demonstrated that patients who undergo rTMS are more likely to respond to treatment and the treatment effect can last beyond the course of treatment.

How is it done?

An acute course of rTMS usually involves 20 to 30 treatment sessions (conducted every weekday, Monday to Friday, over 4 to 6 weeks). At times, you may need to undergo an extension or maintenance of rTMS and this will be discussed with your doctor.

Depending on the treatment protocol, each session may take 5 to 40 minutes to complete.

For optimal treatment outcomes, compliance to the treatment regimen is essential.

What are the possible side effects?

rTMS is generally considered to be safe with very minimal risk. However, there may be some possible side effects, including:

- **Discomfort and pain:** rTMS may stimulate the nerves on the scalp, forehead, or face, and may result in an uncomfortable sensation (similar to the feeling of static electricity). This side effect is usually brief and mild, but for some people, the discomfort can be rather unpleasant. If so, taking paracetamol or ibuprofen can help alleviate the discomfort or pain.
- **Physical side effects:** Headaches, feeling tired, or feeling faint.
- **Medical complications:** Less than 1% of patients may experience manic symptoms (for example, high or irritable mood, increased energy, talkativeness, and grandiose thoughts). Seizures are the most serious side effect, but also the rarest, the estimated risk of seizure is very low at around 1 in 30,000 treatments.

What do I need to do to prepare for rTMS?

Prior to the first rTMS session:

- Provide your informed consent for rTMS.
- Complete the financial counselling at the Neuroscience clinic.
- An educational video for rTMS will be shown to you.
- Please reach Neurology Diagnostic Lab for registration as per the time given for appointment. You may be turned away for the session should you arrive more than 15 minutes later than appointment time.

On the day of an rTMS session:

- You do not need to fast and there will be no general anesthesia required .
- You will wear a cap for the staff to identify the area of the brain to be stimulated. Your cap will then be reused for each subsequent session to ensure that the correct part of the brain is stimulated each time.
- The staff will run through a checklist to ensure that you are ready to commence rTMS.
- You will be comfortably seated on a chair and given earplugs.
- The coil that delivers the magnetic impulses will be placed close to your head, and locked into position.
- The staff will start the session once the magnetic coil has been positioned correctly.
- Upon completion of the treatment session, you may leave the hospital and go about your usual activity.

Acknowledgement by patient

I have read and understood the information provided by the healthcare professional.

Name

NRIC (last 3 digits & alphabet)

Signature & Date