What is TMS Therapy?

- A patient introduction to TMS for the treatment of major depressive disorder







Introduction



This pamphlet is a brief patient introduction to TMS therapy for the treatment of major depressive disorder. It is intended as a supplement to the consultation and advice from your physician, but does not replace these.

For more information on what to expect from the treatment, including what type of side effects you may experience (e.g. headache, worsening depression) you should talk to your doctor. TMS Therapy is a medical procedure and any side effects experienced during or after receiving the therapy should be reported to your doctor.



What is TMS?



TMS is short for transcranial magnetic stimulation.

TMS is a non-invasive treatment where magnetic pulses are delivered to stimulate nerve cells in the part of the brain controlling the mood. This area is often underactive in patients with depression.

Stimulating this particular part of the brain has proven to produce an antidepressant effect on people suffering from depression.

TMS does not require anesthesia or surgery. TMS is not to be confused with ECT (Electro Convulsive Therapy) and it does not affect cognitive function such as memory.



Depression

Depression affects 300 million people worldwide and is the leading cause of disability.

The most common symptoms of depression are feelings of emptiness, sadness or irritable mood in combination with both cognitive and somatic changes. This can significantly affect the individual's capacity to function.

Frequently asked questions about TMS

How does TMS work?

TMS activates the brain nerve cells by repeatedly applying magnetic pulses. TMS is therefore also known as rTMS (repetitive transcranial magnetic stimulation) because more than one magnetic pulse is delivered to the brain during a treatment session.

TMS therapy consists of repeated cycles of TMS followed by rest periods. Diagnosis and initial session is performed by a licensed physician. The remaining treatment sessions will typically be conducted by trained staff under the supervision of the physician.

Who can get TMS therapy?

TMS is a treatment option for adult patients suffering from major depressive disorder who have failed to receive satisfactory improvement from antidepressant medication.

TMS therapy is available by prescription only. Your doctor will use medication dosing records and depression scores among other measures to determine whether or not you are a candidate for TMS therapy.





The magnetic coil which delivers the TMS treatment is typically positioned on the left front side of the head. This is the part of the brain which connects all the different brain areas involved in depression.

How long does the treatment take?

Depending on which treatment protocol your physician prescribes, one TMS therapy session can last from 3 minutes and up to 37 minutes. All protocols, however, will be applied with one treatment session per day, 5 times per week, over a period of 4-6 weeks.

What does TMS feel like?

You sit in a chair in a relaxed position in your doctor's office/clinic. When the magnetic pulses are delivered, you will hear a clicking sound and feel a tapping sensation on your scalp. To reduce the sound, you will use ear plugs during treatment.

Are there any side effects to TMS therapy?

TMS may cause headache or nausea but you should be able to resume your daily activities right after treatment. TMS therapy is a medical procedure and any side effects experienced during or after receiving the therapy should be reported to your doctor.

TMS for depression – in short

- TMS: Transcranial Magnetic Stimulation
- Series of pulsed magnetic stimuli to the brain
- Most common side effects from TMS therapy are headache and nausea
- Does not affect cognitive function
- You will typically be able to resume daily activities right after treatment.
- TMS may be used with or without antidepressants (determined by physician).
- TMS is not the same as ECT (Electro Convulsive Therapy)

What happens during TMS therapy?

The patient wears a **cotton cap** marked with the exact treatment spot. A TMS operator or physician places the **TMS coil** on the patient's head as marked on the cap, and starts the TMS treatment.

A **pillow** is used around the patient's head. The pillow becomes rigid once the air is evacuated. This helps ensure that the patient's head is stable and that the patient is comfortable.

The patient is awake during **treatment**. One session lasts from 3-37 minutes. A full treatment course consists of one session per day, with 20-30 sessions in total.

The patient is seated in a reclinable **treatment chair** with head- and footrest.

Patient Questionnaire

To identify if TMS therapy is right for you, your physician will ask you questions like:

🗆 yes 🗖 no	Do you have epilepsy or have you ever had a convulsion or a seizure?
🛾 yes 🗋 no	Have you ever had a fainting spell or syncope? If yes, please describe on which occasion(s)?
🛛 yes 🗋 no	Have you ever had a head trauma that was diagnosed as a concussion or was associated with loss of consciousness?
🛾 yes 🖾 no	Do you have any hearing problems or ringing in your ears?
🗆 yes 🖬 no	Do you have cochlear implants?
🗆 yes 🖬 no	Are you pregnant or is there any chance that you might be?
🗆 yes 🖵 no	Do you have metal in the brain, skull or elsewhere in your body (e.g., splinters, fragments, clips, etc.)? If so, specify the type of metal.
🛾 yes 🖾 no	Do you have an implanted neurostimulator (e.g., DBS, epidural/subdural, VNS)?
🗆 yes 🗖 no	Do you have a cardiac pacemaker or intracardiac lines?
🗆 yes 🖬 no	Do you have a medication infusion device?
🛾 yes 🖬 no	Are you taking any medications? (please list)
🗆 yes 🗆 no	Did you ever undergo TMS in the past? If so, were there any problems?
🛾 yes 🖾 no	Did you ever undergo MRI in the past? If so, were there any problems?

Affirmative answers to one or more of these questions do not represent absolute contraindications to TMS, but the risk/benefit ratio should be carefully balanced by the operator.



Treatment should only be carried out by licensed physicians or educated technicians supervised by physicians. You doctor will also inform you of safety aspects as well as possible side effects.

TMS treatment may not be effective or appropriate for all patients with major depressive disorder.

*Indications for use

MagVenture TMS Therapy[®] is CE approved for:

"Treatment of Major Depressive Disorder in adult patients who have failed to achieve satisfactory improvement from two prior antidepressant medications, at or above the minimal effective dose and duration in the current episode."

MagVenture TMS Therapy[®] is FDA cleared for:

"Treatment of Major Depressive Disorder in adult patients who have failed to receive satisfactory improvement from prior antidepressant medication in the current episode.

