

# Depression?

It has been shown that over 40% of the patients do not respond to antidepressants. Also 60-70% of the patients do not achieve complete remission, 20% do not recover completely after 2 years of treatment and 10% will stay depressed despite several therapeutic interventions.

## Treatment with rTMS

rTMS might seem remarkable, because it works with magnetic stimulation, but it often takes time for such new interventions to become established. Several extensive scientific studies have been carried out to measure the effects of rTMS treatment for depression, with good results. Furthermore rTMS has been reported by the FDA to have few side effects and can therefore be seen as a safe treatment (FDA).

## Benefits

- ▶ No need for medication, hence no risk of addiction and other side effects
- ▶ First effects noticeable after 10 sessions
- ▶ Sustained effect after 4-8 weeks of intensive treatment
- ▶ Few side effects (a possible side effect can be headache or an unpleasant sensation on the location of stimulation)

## Drawbacks

- ▶ New treatment method (experimental)
- ▶ No reimbursement (yet) by insurance companies
- ▶ A series of refreshment sessions might in some cases be needed after 8-12 months for preservation of the antidepressive effect

## For whom is rTMS suitable?

rTMS is suitable for everyone with mild to severe complaints of depression. This treatment is currently also carried out with good success in therapy-resistant patients with depression. Research also shows that patients with mild complaints of depression might benefit from the treatment with rTMS. The treatment in our practice is offered by a psychologist. The treatment will be embedded in a clinical therapeutical setting with an intake, questionnaires and QEEG.

## More information

For more information about the treatment of depression with rTMS or for making an appointment, please contact Brainclinics in Nijmegen. You can reach us by phone during office hours on +31 (0)24 750 35 05 or by e-mail on [info@brainclinics.com](mailto:info@brainclinics.com). Please visit our website for more information [www.brainclinics.com](http://www.brainclinics.com).



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# Consider rTMS

# rTMS as a treatment for depression without medication!

**About 6% of the adult Dutch population is depressed in some way. In total that makes about 750.000 people with the same complaints as you! There are a lot of different methods to treat depression, like medication, psychotherapy and rTMS. rTMS is a new evidence-based treatment method with proven scientific efficacy. In this brochure you can read what rTMS can do for you.**

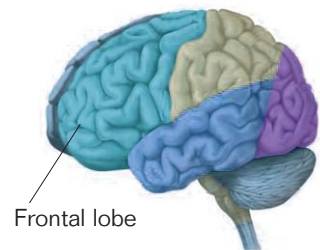
## What is rTMS?

rTMS stands for repetitive Transcranial Magnetic Stimulation. By means of a pulsating magnetic field, specific parts of the brain can be stimulated. This stimulation leads to increased or decreased electrical activity and blood flow in specific parts of the brain. Neurons in the brain will be activated or deactivated by this process. Deviating brain activity, related to the underlying cause of depression will be normalized in this way and comorbid complaints will also decrease.

## What can rTMS do for depression?

Scientific research has shown that the cause of depression lies in the frontal cortex (the frontal lobe). In depression there is 'decreased activity' in the left frontal cortex. To be more precise: in a small area of the brain named the Dorsolateral Prefrontal Cortex (DLPFC). Using rTMS, this small area can be specifically stimulated. Depressive complaints will decrease and this area will function better after repetitive stimulation of this area. This effect usually lasts for approximately 6-12 months. This period of time is often long enough to resolve

the depressive symptomatology for a longer time, due to the cyclical nature of depression. If the depressive complaints do come back after this time, it is possible to get some refresh sessions to preserve the antidepressive effect.



## rTMS in practice

Clients will be lying in a comfortable chair with a figure-of-8 coil placed above the head. This coil generates a pulsating magnetic field that activates specific areas in the brain. This pulsating magnetic field will make a ticking sound. These ticks can be felt, but are not painful, they feel like tapping your arm with a pencil. An rTMS session will usually take about 40 minutes. A noticeable effect should be accomplished after 10 sessions and there will be 20 to 30 sessions needed for a sustainable result.

**More than 40% of the patients don't respond to the treatment with antidepressants!**

## rTMS or medication?

Medication is often prescribed in the treatment of depression, because the effect and results are well known. rTMS is fairly new and that makes it unknown. We will give you the benefits and drawbacks of both.

## Treatment with medication

The two most important types of medication that are currently prescribed are: Tricyclic antidepressants (TCA's) like Dozopin and Selective serotonin reuptake inhibitors (SSRI's) like Prozac or Xeroxat.

## Benefits

- ▶ Effect has comprehensively been tested and demonstrated
- ▶ Prescribed easily by GP or psychiatrist
- ▶ Completely reimbursed by the Insurance

## Drawbacks

- ▶ A noticeable effect after 2-4 weeks
- ▶ Efficacy of medication alone is only ± 40-50%
- ▶ Risk of overdose (especially with TCA's)
- ▶ Combination with other medication and/or alcohol can be dangerous
- ▶ Risk of addiction
- ▶ Increased likelihood of suicide (especially with children)
- ▶ A lot of side effects such as nausea, fatigue, weight gain, sleep problems, decreased libido, memory loss, transpiration, heart rush, nightmares and a dry mouth.