THE TRUE SPECIALIST IN TMS THERAPY

Excellence in Brain Stimulation & Rehabilitation Technology
Since its foundation in 2003, REMED has been specialized in researching and developing world class products for brain stimulation as a true solution of depression.

As a result, REMED has successfully introduced state-of-the-art TMS device, TAMAS® first in its kind in Korea, and is expanding its product portfolio to meet the diverse needs from the field.

Experience the powerful values of TAMAS® providing strong magnetic filed of 3 Tesla for deeper brain stimulation.

REMED is the name of true specialist of TMS therapy.

WHEN YOUR PATIENTS ARE SUFFERING FROM

- Depression
- Parkinson’s disease
- Multiple sclerosis
- Tinnitus
- Hallucination
- Facial stroke
- Epilepsy
- Anxiety
- Obsessive compulsive disorder
- Panic
- Stroke
- Epilepsy
- Parkinson’s disease
- Multiple sclerosis
- Tinnitus
- Hallucination
- Facial stroke
- Anxiety
- Obsessive compulsive disorder
- Panic
- Stroke

REMED PROVIDES TRUE SOLUTION FOR THEM AS GENUINE SPECIALIST OF TMS THERAPY.
**WHY TMS THERAPY?**

*(TRANSCRANIAL MAGNETIC STIMULATION)*

Transcranial Magnetic Stimulation (TMS) is a safe, non-invasive therapy method that uses rapidly changing magnetic field to stimulate the neurons in the brain. It is indicated for the treatment of Major Depressive Disorder (MDD), and other certain conditions, for adult patients who have failed to achieve satisfactory improvement from prior antidepressant medication.

Also, TMS is widely accepted as a unique research tool for the investigation of broad variety of issues in different fields:

- **Cognitive Neuroscience** - in studying mental processes related to memory, speech, perception and functional connection
- **Psychiatry** - to influence specific brain function within the dorsolateral prefrontal cortex
- **Neurophysiology** - used in the stimulation of the peripheral and central nerve pathways
- **Rehabilitation** - used in the promotion of muscle recovery and the relief of nerve spasticity

**TECHNICALLY PROVEN MECHANISM OF TMS**

TMS therapy is an outpatient procedure and does not require anesthesia or sedation, so the patient can go back to daily life right after treatment. Unlike other treatments, such as electro-convulsive therapy (ECT), TMS does not cause cognitive side effects or memory problems.

- **Time-varying electrical current in a coil is produced.**
- **More focused magnetic field from figure of 8 shaped transducer passes unimpeded through skull.**
- **Neurons in the cortex of brain (PFC) is stimulated to lead to behavioral changes.**

**MRI images for patients with Depression and ADHD after TMS treatment**

20 Hz

1 Hz

Patient with Depression

Patient with ADHD
TAMAS®
Most reliable & powerful TMS Device
Experience the powerful values of TAMAS® providing strong magnetic field of 3 Tesla for deeper brain stimulation.

Features & Benefits
- Convenient & easy operation by touch screen color display
- Unique design of 8 shaped transducer for focused brain stimulation
- Patented oil circulating transducer for intensive & non-tiring treatment
- 4 stimulation modes for diverse applications: Single, Repetitive, TBS and Pair modes

Technical Specifications
- Peak Magnetic Energy: 0.5~3.0 Tesla @ 100% output
- Frequency: Maximum 100Hz
- Train Duration: User selectable in 0.1 sec increment
- Output waveform: Symmetric biphasic pulse
- Pulse width: 350㎲
- Weight: 60Kg
- Power Supply: 200~240 Vac 50/60 Hz
- Software: Integrated color touch screen display
- 4 stimulation mode (single, repetitive, TBS(Theta Burst Stimulation), Pair Stimulation)

Clinical Indications
- Depression
- Hallucination
- Stroke
- Obsessive Compulsive Disorder
- Insomnia
- Parkinson’s Disease
- Anxiety
- Headache
- Facial Palsy
- Bipolar Disorder
- Panic
- Multiple Sclerosis
- Schizophrenia
- Tinnitus
- Epilepsy

The 1st TMS device approved by KFDA in Korea
Features & Benefits
• Compact yet powerful TMS device for optimized treatment effect
• Far less space occupation due to compact size
• Easy and minimized operation by touch buttons for 8 kinds of treatment modes
• Easy MEP (Motor Evoked Potential) location by individual patient’s head gear (No need to make 2nd MEP for the same patient due to marked head gear)
• In-house treatment available for patients who are not available for frequent visit to clinics

Technical Specifications
Magnetic Energy 0.5~2.5 Tesla @ 100% output
Repetition rate 100Hz
Timer Set 60 minutes, 1 min increment
Preset Mode Mode 1~8
Weight Device : 5Kg, Transducer : 2Kg
Power Supply 200~240Vac 60Hz, Single Phase
Dimension (W*H*D) 412*316*97mm

Clinical Indications
Depression, Hallucination, Stroke, Obsessive Compulsive Disorder, Insomnia, Parkinson’s Disease, Anxiety, Headache, Facial Palsy, Bipolar Disorder, Panic, Multiple Sclerosis, Schizophrenia, Tinnitus, Epilepsy

BRAIN STIM®
A compact TMS device that brings big satisfaction to patients

World’s 1st Compact TMS Device with Customized MEP location
Side effects for patients with Drug therapy

Insomnia, Fatigue Nausea, Weight Gain, Sexual Dysfunction

For the patients with TMS therapy

CLINICALLY PROVEN TMS THERAPY

RTMS may be a good choice for pregnant women with depression.

Dongjun Zhang & Zeqing Hu

Abstract

Repetitive transcranial magnetic stimulation (rTMS) may be a good choice for pregnant women with depression. In the US, the Food and Drug Administration has approved antidepressants for pregnant women, but many mothers of newborns with defects still want to improve their mental state after childbirth. In this study, we randomly assigned pregnant women with depression to receive rTMS treatment or to receive medication. Treatment with rTMS was started in the early pregnancy and lasted for 1.5 days. The antidepressant paroxetine was approved by the Food and Drug Administration as a new type of antidepressant for pregnant women. However, we have not found an appropriate treatment until now. In the US, the Food and Drug Administration has not approved any kind of antidepressant drugs which could be used in early pregnancy. But Barbara Mintzes and Jureidini (2008) concluded that paroxetine did not appear to be associated with an increasing risk of fetal defects following use in early pregnancy.

In our hospital, three pregnant women with depression received the therapy of rTMS in the early pregnancy. After systemic treatments, the patient's depressive symptoms were significantly relieved, and each of them smoothly completed the pregnancy and gave birth to healthy babies. We acknowledge that the author of this article is a woman named Yunxia of the Department of Forensic Psychiatry, West China Hospital, Sichuan University.

Keywords: Repetitive transcranial magnetic stimulation (rTMS), Depression treatment

References

Shajahan et al. (2002) found that rTMS can make significant improvements in patients with depression. The biological effect of rTMS on the cerebral cortex is regarded as a kind of medication and is used in medical practices. Due to the possible adverse effects on fetus, the treatment of pregnant women with depression is a difficult issue. Some researchers (Shajahan et al. 2002) found that rTMS can make significant improvements in patients with depression. The biological effect of rTMS on the cerebral cortex is regarded as a kind of medication and is used in medical practices. However, we have not found an appropriate treatment until now. In the US, the Food and Drug Administration has not approved any kind of antidepressant drugs which could be used in early pregnancy. But Barbara Mintzes and Jureidini (2008) concluded that paroxetine did not appear to be associated with an increasing risk of fetal defects following use in early pregnancy. However, we have not found an appropriate treatment until now. In the US, the Food and Drug Administration has not approved any kind of antidepressant drugs which could be used in early pregnancy. But Barbara Mintzes and Jureidini (2008) concluded that paroxetine did not appear to be associated with an increasing risk of fetal defects following use in early pregnancy.

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