

SOUTHWESTERN NEWS

Media Contact: Donna Steph Hansard
214-648-3404
donna.hansard@utsouthwestern.edu

Magnetic stimulation treatment for depression helping difficult-to-treat cases at UT Southwestern

DALLAS – May 10, 2005 – Barbara Baas ran away from home and tried to kill herself as a teenager. As an adult, she has tried more than 15 varieties of antidepressants. But, thanks to a new weapon, she has finally reached a truce in a 45-year battle.

Mrs. Baas says a new treatment for depression is changing her life – so much so that she’s willing to drive 115 miles five days a week from Decatur to UT Southwestern Medical Center where she is participating in an experimental study. She undergoes transcranial magnetic stimulation (TMS), a noninvasive, nonpharmacological technology, in which short pulses of magnetic energy stimulate nerve cells in a specific area of the brain – an area that research has shown to be associated with depression.

“I am experiencing joy for the first time in years,” Mrs. Baas, 60, said. “I’m participating in life again. I went shopping at a new store near my home and realized it wasn’t drudgery. I actually enjoyed myself.”

UT Southwestern is one of 14 sites in the United States, Australia and Canada participating in the clinical trial for TMS. It is being evaluated for treating moderate, chronic and recurring depression, particularly in people who have responded poorly to antidepressant medications.

“Neural stimulation has been shown to be effective for treating depression,” said Dr. Mustafa Husain, professor of psychiatry and internal medicine and lead researcher for the UT Southwestern study site. “We’ve known that for years. The problem in the past has been that generalized neural stimulation can cause significant side effects, such as cognitive or memory loss.”

Not so with TMS, which produces the same amount of magnetic energy as magnetic resonance imaging and has little to no side effects.

“With magnetic stimulation, we can provide neural stimulation in a very specific, localized focal area, avoiding those parts of the brain that can cause memory deficits,” Dr. Husain said. “In the case of depression, the left dorsal and frontal part of the brain, which is associated with mood regulation, is targeted.”

For Mrs. Baas, treatments involve lying awake in a chair for almost 40 minutes with two small electromagnetic coils strategically placed on her head and loud clicking noises sounding in her ears. Magnetic pulses are aimed at the left prefrontal cortex of the brain. Inside the brain, the magnetic pulses produce an electric field. This field, in turn, stimulates the neurons in that region of the brain,

(MORE)

TMS treatment – 2

yet the amount of electricity created in the brain is too small for her to feel and does not trigger a seizure.

When the treatment is finished, Mrs. Baas gets up and drives herself home, having experienced no side effects except for an occasional headache.

Describing herself as “the poster child for mental illness,” Mrs. Baas said she’s experienced bouts of “absolute hopelessness” throughout her life.

“There were times when I couldn’t get through the day. I was in a pathetic state. When you’re in major depression, you have no energy, no joy. You spiral down and can’t concentrate or work.”

As a study participant, Mrs. Baas does not know if she’s getting the actual treatment or a placebo version. Participants who do not respond to the initial six-week study may be eligible for a follow-up study, at which time they will receive active TMS treatments.

“Whether I’m receiving it or not, I am absolutely thrilled with whatever is going on,” she said. “Plus, it forces me to leave my house every day, which is also good for me.”

Depression affects more than 18.8 million adult Americans each year – 12.4 million women and 6.4 million men – according to the National Institute of Mental Health and is one of the most common and debilitating of all diseases.

“This is a treatment, not a cure for depression,” Dr. Husain said. “We need better and more treatment alternatives for depression. Our hope is that this will prove to be another option for people who suffer from this devastating disease.”

To be eligible for the study, individuals must be 18 to 70 years old, have been diagnosed with major depressive disorder that has failed to respond to at least one antidepressant medication, and not be pregnant or have a significant neurological disorder.

For more information, please call 214 648-2806.

###

This news release is available on our World Wide Web home page at
<http://www.utsouthwestern.edu/home/news/index.html>

To automatically receive news releases from UT Southwestern via e-mail,
subscribe at www.utsouthwestern.edu/receivenews