



Dr. Philip Janicak of Rush University Medical Center is "cautiously optimistic" about the transcranial magnetic stimulator he is demonstrating on Selika Gutierrez, a registered nurse.

New approach to depression tested

Local hospitals join study of magnetic pulses sent to brain

BY JIM RITTER
Health Reporter

Two Chicago hospitals are testing a new treatment for severely depressed patients who aren't helped by drugs: magnetic pulses.

During the 45-minute treatment, about 3,000 pulses, each lasting one-thousandth of a second, are directed at the part of the brain linked to depression.

It's called transcranial magnetic stimulation, or TMS. Several small studies have found the experimental treatment safely relieves depression in 40 percent to 50 percent of patients.

The U.S. Food and Drug Administration likely would approve TMS if these findings are confirmed in a study of nearly 300 patients under way at 16 centers, including Rush University Medical Center and Northwestern Memorial Hospital.

"We're cautiously optimistic this will be an important advance in the treatment of severe depression," said Rush psychiatrist Philip G. Janicak.

Studies have found more than 30 million U.S. adults will suffer depression during their lifetimes, and as many as 20 percent either aren't helped by drugs such as Prozac and Zoloft or can't tolerate

the side effects.

The standard treatment for such patients is electroconvulsive (shock) therapy. TMS is a gentler alternative. Unlike shock therapy, TMS usually does not cause seizures or temporary memory loss or require general anesthesia.

TMS is applied to the left prefrontal cortex, on the left side of the head toward the front. Magnetic pulses induce small electrical currents that apparently alter the brain's mood circuitry.

May cost up to \$4,000

It felt as if "there was a woodpecker in my head pecking away," said a patient interviewed by the manufacturer, Neuronetics Inc. "It was a little bit uncomfortable . . . but not to the point where it was unbearable."

Possible side effects include mild headache, scalp irritation, ringing in the ears and a slight seizure risk.

TMS requires a major commit-

ment. A patient would need five treatments a week for four to six weeks, and thereafter perhaps occasional maintenance treatments and antidepressants. Janicak estimates the initial treatment cycle would cost \$3,000 to \$4,000.

However, severely depressed patients "are willing to do almost anything in order to get better," said Northwestern psychiatrist William Gilmer.

TMS also has been studied for Parkinson's disease, epilepsy, schizophrenia, bipolar disorder and migraines.

In the depression study, patients will sit in a dental-style chair and receive magnetic pulses from a coil above their heads. Half will receive fake treatments that do not include magnetic pulses. Their results will be compared with patients who receive the real treatment.

Call Rush at (800) 345-8707 or Northwestern Memorial at (312) 926-8400 for information.