

courant.com

<http://www.courant.com/news/health/hc-othertreatments.artjul06,0,114309.story?coll=hc-headlines-custom2>

From the Los Angeles Times

New Treatments Show Promise

New Method Offers Hope For The Treatment-Resistant

By MARIANNE SZEGEDY-MASZAK
Los Angeles Times

July 6 2006

Other promising new treatments for depression include:

DNA-guided medicine: For the past six months, patients at the Institute of Living at Hartford Hospital and from other areas in Connecticut and Western Massachusetts have been able to get a test to determine which antidepressants are likely to work for them.

Dr. Gualberto Ruano, president and chief executive of Genomas Inc., a Hartford biotechnology company that markets the tests, said doctors have ordered a DNA test for patients who have not had success with antidepressant medication. The test shows whether the patient will have difficulty metabolizing particular medications. It is when a drug cannot be metabolized that it doesn't work well and that side-effects develop. He likens the metabolic pathways to highways and says that, "We are finding in 10 percent of patients, we know that at least one major pathway is deficient. It is closed." Ruano said his goal is to see this test used to determine which antidepressant to prescribe initially. So far, Ruano said, 100 patients have been tested.

Rapid transcranial magnetic stimulation: Much like the way a defibrillator works in the heart, this form of stimulation uses a powerful magnet to deliver an electric jolt to the brain.

In clinical trials, many patients who failed to respond to several other treatments improved within a week of the first round of RTMS sessions, and the vast majority were significantly better after two weeks of daily 20-minute sessions.

Deep brain stimulation: This is the most invasive treatment for depression, requiring an electrode implanted into a particular part of the brain.

It was originally used to treat movement disorders such as Parkinson's disease by targeting one area of the brain. But researchers found - by serendipity - that if the electrode was slightly misplaced, it could either cause or alleviate the symptoms of depression, including hopelessness and suicidal thinking.

Selegiline patch: This is a new delivery system for an old antidepressant, one of the monoamine oxidase inhibitors.

Although an often-effective treatment for depression, the MAOIs required patients to avoid foods and medicines that contained high levels of the amino acid tyronine. That substance, which is included in such items as pickles, wine and decongestants, can interact with the antidepressant and cause a sharp increase in blood pressure that can, potentially, cause a stroke. Often, patients simply got tired of having to be so cautious and discontinued the drugs.

The new patch, however, bypasses the stomach altogether. As the American Journal of Psychiatry reported while the patch was being tested in 2002: It "was an effective and well-tolerated treatment for adult outpatients with major depression. The typical side effects commonly seen with traditional monoamine oxidase inhibitor antidepressants were not observed." In February, the FDA approved the patch, with the brand name Ensam.

Quantitative electroencephalogram: Figuring out who might respond to what drugs has been a basic problem in depression treatment. Dr. Andrew Leuchter and his colleagues at UCLA are using the QEEG – a noninvasive and easy to use brain mapping technique – to determine the various types of depression and the response to a range of antidepressants.

At nine sites throughout the country, depressed patients are having their brains mapped before treatment, 48 hours after receiving their first dose of an antidepressant and several weeks later. Researchers will then see how the medication works over time and how people describe the progress, and possibly the lifting, of their depression.

The researchers hope to eventually determine within a week if a particular treatment works or not, thereby increasing the likelihood of quickly finding the right medicine.

Courant Staffer Kathleen Megan contributed to this story.

Copyright © 2006, *The Los Angeles Times*
