

Measuring Your Moods

New research points to a possible test for bipolar disorder.

by Shelly
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Bipolar disorder, with extreme swings from euphoria to depression, is difficult to live with and can be difficult to diagnose.

Mayo Clinic researchers have made a discovery that may help in diagnosis: a new approach to brain imaging that could lead to a test for the condition.

A diagnostic test would be welcome news for those who suspect they are dealing with this debilitating condition that affects about two in 100 adults in America. An accurate diagnosis is important because with no treatment or the wrong treatment, bipolar disorder can worsen.

Now, diagnosing bipolar disorder can be challenging, especially in children and patients who have other psychiatric disorders, too. There's no simple test. Doctors must rely on discussions with patients, who may not realize how much the

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disorder is affecting their lives.

Bipolar disorder can cause havoc in many ways, with relationships, at school or on the job. According to the National Institute of Mental Health, alcohol and drug abuse are common among people with bipolar disorder. And one in five commit suicide.

That's why an objective diagnostic test would be a huge step forward., says Dr. John Port, M.D., Ph.D., a diagnostic radiologist at Mayo Clinic and lead researcher in the study.

In the two-year study, Port and his colleagues combined existing imaging techniques in a new way to search for clues about bipolar disorder.

They used magnetic resonance spectroscopy, a special form of imaging that allows researchers to analyze chemical properties of tissues; a double-strength 3 Tesla magnet to reduce scan time; and a technique to correct for the amount of cerebral spinal fluid in each sample, allowing for more accurate measurement of brain

chemical concentrations.

Researchers compared images from 21 people with bipolar disorder and 21 similar people without mental illness. In two regions of the brain, researchers found that four chemicals were significantly different for people with bipolar disorder. The areas control behavior, movement and sensory information.

Port says the research is preliminary, but encouraging. "It's possible there could be a diagnostic test for bipolar disorder in three to five years," he says.

Then patients, their families and care providers would know the condition with which they were dealing and more quickly find ways to smooth out the debilitating ups and downs of bipolar disorder. ▼

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