Blood Test May Show If Antidepressants Will Help Patients

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About 60 percent of depressed people don't get relief from antidepressants. But a new blood test could let doctors predict how well patients might respond to these prescription meds, according to a Loyola University Medical Center study presented at the 2011 annual meeting of the Society of Biological Psychiatry and the 4th Annual Illinois Brain, Behavior and Immunity Meeting, and reported by ScienceDaily.

For the study, scientists followed 35 participants taking escitalopram—a selective serotonin reuptake inhibitor (SSRI) sold under the brand name Lexapro—for depression. Researchers measured participants' levels of vascular endothelial growth factor (VEGF), a protein found in the bloodstream that supports blood vessel growth in the brain and works in various other ways to keep brain cells healthy and functioning properly.

Findings showed escitalopram helped 85 percent of participants with high VEGF levels. Meanwhile, less than 10 percent of participants with low VEGF levels got any benefit from the drug.

"This would be the first time we would have a predictor for how well a patient would respond to an antidepressant," said Angelos Halaris, MD, PhD, the study's lead author.

While scientists aren't sure why SSRIs work for some people but not others, one theory is that depression causes certain parts of the brain to waste away. SSRIs may help regrow brain tissue in those areas. The study supports this theory and suggests that VEGF plays a key role in this regrowth.

If further research supports the study results, doctors may eventually administer a blood test to see which medications are best suited to a patient's needs. Physicians would prescribe non-SSRI drugs to those with low VEGF levels.

What should depressed patients do in the meantime? They should talk to their mental health professional to make sure they're getting the right help for their personal needs.

Click here to read more about depression medications.

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