



## PTSD recovery may be linked to serotonin

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WESTMEAD, Australia, June 21 (UPI) -- Researchers in Australia say people may inherit a factor related to serotonin that may affect recovery from post-traumatic stress disorder.

Researchers at the Brain Dynamics Center, Westmead Millennium Institute, Westmead Hospital in Australia explain those who carry a short allele -- a DNA sequence of a particular gene -- of a version of this genetic factor -- the serotonin transporter genotype -- have shown greater vulnerability to suffering depression and other symptoms following exposure to extremely stressful situations that characterize PTSD.

The study leader, Dr. Richard Bryant, says this genetic factor also increases the activation of an emotion control center in the brain -- the amygdala -- and suggest serotonin may play a role in resiliency, the ability to recover from disorders such as PTSD.

Bryant and colleagues set up a study to assess whether this genetic factor could help predict changes in PTSD patients who have been given treatment.

They classified PTSD patients according to their genotype and gave them eight weeks of cognitive behavior treatment.

The study, published in *Biological Psychiatry*, determined one-third of the patients with PTSD did not respond to treatment.

"Patients with PTSD who carried the short allele of the serotonin transporter gene promoter responded more poorly to treatment than other PTSD patients," Bryant said in a statement. "This study highlights that the serotonin system is implicated in responding to cognitive behavior therapy."

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