Medical Xpress

Health food supplement may curb compulsive hair pulling

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University of Minnesota Medical School researchers have discovered that a common anti-oxidant, widely available as a health food supplement, may help stop the urges of those with trichotillomania, a disorder characterized by compulsive hair-pulling.

Fifty people enrolled in a double-blind 12 week study; half were given N-Acetylcysteine, an amino acid commonly found in health food supplements. The average age of patients who enrolled was about 34, and most started pulling hair compulsively by the age of 12. Patients were given 1,200 mg of N-Acetylcysteine every day for six weeks. For the following six weeks, the dosage was increased to 2,400 mg per day. After nine weeks, those on supplement had significantly reduced hair-pulling. By the end of the 12 week study, 56 percent reported feeling much or very much improved, while only 16 percent on the placebo reported less pulling.

The study is published in the July, 2009 issue of the Archives of General Psychiatry.

"Trichotillomania is compulsive in the sense that people can't control it. People feel unable to stop the behavior even though they know it is causing negative consequences," said Jon Grant, M.D., J.D., a University of Minnesota associate professor of psychiatry and principal investigator of the study. "Some people don't even know they are doing it."

Those who have trichotillomania compulsively or habitually pull their

hair to the point of noticeable loss. It is most commonly associated with women, but men can also be affected, and pulling can occur anywhere on the body. Grant believes 2 to 4 percent of the general population is impacted by trichotillomania on some level.

"These are people who have tried all kinds of things that have never worked," Grant said. "The reality is that if you pull hair and it is on a noticeable part of the body, people are really disabled by this. It's not easy to go out in public if people are noticing your bald spots. Self esteem is a huge problem. This supplement may offer hope."

The study is significant on another level because it's one of the first studies of compulsive behaviors to look at lowering levels of glutamate - a chemical that triggers excitement - in the brain to curb harmful behavior rather than serotonin, a naturally occurring chemical most commonly linked to compulsive behavior. This supplement affects levels of glutamate in a specific area of the brain, making it easier for patients to put the breaks on their harmful behavior.

For that reason, Grant believes glutamate modulators such as N-Acetylcysteine may be applicable to other disorders, addictions, and compulsive behaviors.

Source: University of Minnesota (news : web)