Cerebellar ataxia can't be cured, but some cases can be treated

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No cures are possible for most patients who suffer debilitating movement disorders called cerebellar ataxias.

But in a few of these disorders, patients can be effectively treated with regimens such as prescription drugs, high doses of vitamin E and gluten-free diets, according to a study in the journal *Movement Disorders*.

"Clinicians must become familiar with these disorders, because maximal therapeutic benefit is only possible when done early. These uncommon conditions represent a unique opportunity to treat incurable and progressive diseases," first author Adolfo Ramirez-Zamora, MD, co-author José Biller, MD, and colleagues write. Dr. Ramirez-Zamora is an assistant professor of neurology and the Phyllis E. Dake Endowed Chair in Movement Disorders at Albany Medical Center Department of Neurology, and a former chief neurology resident at Loyola University Chicago. Dr. Biller is chair of the Department of Neurology of Loyola University Chicago Stritch School of Medicine.

The word ataxia means without co-ordination. Ataxia symptoms include poor coordination, unsteady walk, difficulty speaking and swallowing, involuntary back-and-forth eye movements and difficulty performing fine-motor skills such as writing or buttoning a shirt. Hereditary ataxias are degenerative and progress over time. Ataxias usually are due to damage to the cerebellum, a part of the brain that controls muscle coordination.

Chronic cerebellar injury due to alcohol or other commonly used drugs such as lithium can be treated by discontinuing the offending drugs, the authors report.

Below is a sampling of other effective treatments for cerebellar ataxias detailed in the article:

Ataxia with vitamin E deficiency (AVED) impairs the body's ability to use vitamin E, resulting in ataxia and other debilitating symptoms. High doses of vitamin E (800 mg/d) typically stop disease progression and lead to neurological improvement - although recovery may be slow and incomplete. "The results of vitamin E supplementation also seem to be most beneficial if started in patients with less than 15 years of disease duration; the sooner after diagnosis the supplementation is begun, the better," the article said.

Cerebrotendinous xanthomatosis (CTX) is treated with chenodeoxycholic acid, which is made from naturally occurring bile acid. Beginning treatment early is crucial to preventing neurological deterioration.

Gluten ataxia can be treated with a strict gluten-free diet. Glutose transporter type 1 deficiency can be treated with a high-fat, low-carb ketogenic diet. Glutamic acid decarboxylase ataxia can be treated with intravenous immunoglobulin (IVIG) or steroids.

More information: Treatable Causes of Cerebellar Ataxia, *Movement Disorders*, 2015.

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