

Drug Combo Could Slow Heart Decline in Muscular Dystrophy



According to a new study published by The Lancet Neurology, the early use of available heart failure drugs can slow the progressive decline in health function in boys and young men with Duchenne muscular dystrophy (DMD).

DMD is a genetic disorder in which the patient has a lack of dystrophin, a protein that is important to keep muscle cells intact. Muscles rapidly degenerate and weaken in patients with DMD. The disease mainly affects males and is a leading cause of death among boys and young men.

The study was led by Dr. Subha Raman, a cardiologist and professor at The Ohio University Wexner Medical Centre. In a clinical trial conducted at multiple sites, a team of DMD experts tested the combination of eplerenone and either an ACE inhibitor or an angiotensin receptor blocker (ARB).

The trial was based on earlier findings that demonstrated this combination of drugs reduced muscle damage and preserved function in an animal model. 42 boys with DMD who had shown evidence of early heart muscle damage were enrolled in the trial. They randomly received one pill of either 25 milligrams of eplerenone or placebo daily for one year. All participants also received background therapy with either an ACE inhibitor or ARB. Study participants had cardiac MRIs before and at six and 12 months after starting the study.

The findings of the study showed that decline in left ventricular function was significantly less in the eplerenone treatment group as compared to those on placebo.

According to Dr. Raman, "this research offers evidence that supports the early use of these readily available medications." However, she points out that at least six months of therapy was needed to realise benefits from the treatment. She is hopeful that this combination of drugs to slow down the progression of disease could potentially improve the quality of life of the patients as well as their families.

Dr. Linda Cripe, a paediatric cardiologist at Nationwide Children's Hospital in Columbus and the co-investigator for this study, also believes that this treatment strategy could become the standard of care for patients suffering from DMD.

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Source: Lancet Neurology

Image Credit: The Ohio State University Medical Centre

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