

Mayo Clinic News Network

Title: ALS Stem Cell Trial

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Intro: 15 people a day in the U.S. hear the devastating news that they have ALS. Also called Lou Gehrig’s disease, it is a gradually worsening condition that is always fatal. That is not to say it is a disease without hope. Promising research using stem cells is now being tested. Here’s Dennis Douda for the Mayo Clinic News Network.

Video	Audio
Total running time [Est. trt 1:50]	
	“Running was my biggest thing. “
Dennis Douda speaking	Joe Evangelist used to love to run, to work out, to jump on his big Harley Davidson and cruise the open road. He used to.
Joe Evangelist speaking	“ With the muscle wasting, my hands get tired fast and I can’t hang on.”
Dennis Douda speaking	The persistent weakening of his muscles turned out to be ALS, amyotrophic lateral sclerosis. Joe’s first instinct was to just hit the gym and try to rebuild his strength.
C.G. Joe Evangelist ALS Patient	“When I was diagnosed I was like, I’ll go out and work hard and do all this, and they were like ‘no, no, no, don’t do that.’”
Dr. Nathan Staff speaking	“It’s a horrible disease.”
Dennis Douda speaking	Mayo Clinic neurologist Dr. Nathan Staff says there’s no cure and no effective treatment.
C.G. Nathan Staff, M.D., Ph.D Mayo Clinic Neurologist	“It’s caused by degeneration of neurons that live in the spinal cord, the brain stem and in the brain, and those neurons control muscles.”
Dennis Douda speaking	<p>Eventually paralysis becomes so severe patients even lose even the ability to breathe. That’s why Joe volunteered for a clinical trial involving stem cells.</p> <p>Dr. Staff says the Mayo research team collects cells from the patient’s own body fat and cultures them in a lab for 6-to-8 weeks until they multiply to as many 200 million stem cells. Then they’re injected into the spinal fluid.</p>
Dr. Nathan Staff speaking	“Where they don’t normally live, and are known to secrete factors that are known to help those neurons live longer.

	So there are different mechanisms by which stem cells may be helpful for ALS. The avenue that we're pursuing is to use them to serve as a neuro-protective agent."
Joe Evangelist speaking	"A ray of hope is huge."
Dennis Douda speaking To learn more about clinical trials: http://www.mayo.edu/research/clinical-trials	Although this is the first phase of human testing for this approach, the hope one day is to slow or completely halt progression of the disease. For the Mayo Clinic News Network, I'm Dennis Douda.

Anchor tag: The FDA just approved another clinical trial which Mayo Clinic will take part in. The BrainStorm Phase II trial will look into whether stem cells can be used to actually **replace** the neurons that have been destroyed by ALS.

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