**Stem cells could produce insulin**

Jake Godin 2:46 PM, Feb 18, 2015



By using stem cells, a group of Harvard scientists have brought the medical world closer than ever to effectively treating diabetes.

The scientists claim to have successfully created large amounts of the vital insulin-producing betatrophin cells that those diagnosed with Type 1 diabetes lack.

Currently those with Type 1 diabetes, which is usually first diagnosed during childhood, must inject themselves with insulin multiple times a day in order to make up for their lack of beta cells.

It's a treatment that one stem-cell researcher at Harvard Medical School told NPR is "a kind of life-support for diabetics. It doesn't cure the disease and leads to devastating complications of the disease."

But this latest research would change that by providing diabetic patients with the beta cells required to maintain their blood glucose levels, and possibly paving the way for a cure for diabetes.

The team published their findings in the scientific journal Cell on Thursday and said one or two flasks of the stem-cell-generated beta cells might be enough to treat a diabetic patient.

The Harvard Gazette says Doug Melton, who led the research, started searching for a cure 23 years ago after his infant son was diagnosed with Type 1 diabetes. His daughter was also eventually diagnosed with Type 1 diabetes.

But even with this latest development, The Boston Globe says Melton cautions the work still has a long way to go before it will be tested in patients.

That didn't stop others in the medical field from hailing Melton and his team's work, though.

One professor told The Telegraph the research was "one of the most important advances to date in the stem cell field," while another told Harvard Magazine it will "leave a dent in the history of diabetes."

Although the team still needs to solve the issue of immune systems attacking foreign beta cells injected into a patient, Bloomberg says Melton is considering using a small dispensing device instead, which could bypass the problem.