Research Breakthroughs

Research Breakthrough Kindles Hope For Diabetes Vaccine

(NAPSA)—One day it may be possible to stop, prevent and even cure type 1 diabetes—and that day may be coming sooner than many think. That is the belief of the researchers behind the Diamyd diabetes drug currently being tested across the U.S.

Type 1 diabetes, or juvenile diabetes, is a serious disease, which renders a child dependent upon daily insulin injections for survival for the rest of his/her life. More than 1 million Americans live with type 1 diabetes, and the number of new cases among children is growing at an alarming rate of 3–4 percent every year. Unlike other medical conditions that may wane or be cured, you never have a day off from type 1 diabetes, and have to constantly check blood sugars, inject insulin and juggle the daily factors of food intake, stress, exercise, moods, growth and everything else that affects blood sugar levels.

A Vaccine to Prevent Type 1 Diabetes—and an Eventual Cure?

The underlying cause of type 1 diabetes is that the body's own immune system mistakenly attacks the cells that make insulin. By the time of diagnosis, most of the cells have been destroyed, and the trick is to keep the remaining ones from being killed off, too.

One of the latest efforts in this area is the DiaPrevent diabetes research study investigating the use of a drug called Diamyd, or GAD, which appears to stop or delay the autoimmune attack against the insulin-producing cells. The treatment consists of a few simple injections and has an impressive safety profile from previous trials. The scientists behind the DiaPrevent study hope to find that Diamyd preserves the remaining insulin-producing cells in children recently diagnosed with type 1 diabetes. "GAD therapy may soon contribute to a paradigm shift when it comes to how to treat new-onset type 1 diabetes," says Dr. Jerry Palmer, lead investigator of the nationwide study and professor of medicine at the University of Washington.

Photo credit: Children With Diabetes (CWD)

Frequent blood sugar checks are a daily part of life for these kids.

GAD may eventually even be used as a vaccine to prevent type 1 diabetes altogether. A pilot prevention study was recently started in Sweden with healthy children who have a high risk for developing type 1 diabetes, and further prevention studies are planned.

If the autoimmune attack is stopped, it may allow for regeneration of the lost insulin-producing cells to actually cure the condition in those already living with the disease. A smaller study combining Diamyd with drugs that stimulate regeneration of insulin-producing cells is evaluating this concept.

Be the First to Access the Vaccine

The DiaPrevent diabetes research study is actively enrolling participants between the ages of 10 and 20 who have been diagnosed with type 1 diabetes within the past three months. Those interested in participating or learning more can visit www.diaprevent.diamyd.com.