

Islet transplant into the omentum results in production of insulin for type 1 diabetic woman

By [Vittorio Hernandez](#) [@vitthernandez](#) on November 07 2016 3:19 PM



Medical experts shared on Sunday at the Naples Diabetic Conference a new treatment for [type 1 diabetes](#) which resulted in a patient producing insulin again. The procedure involves an islet being transplanted into a woman's omentum which started production and regulation of insulin normally done by the pancreas.

The omentum is a sheet of fat attached covered by the peritoneum. The greater omentum is found on the bottom edge of the stomach and hangs down in front of the intestines. [Islets of Langerhans](#) are clusters of cells containing 3,000 to 4,000 cells. According to the Diabetes Research

Institute, a healthy adult pancreas has about 1 million islets. The islets work together to regulate blood sugar.

A few days after the [islet transplant](#), the patient, Wendy Peacock – who used to check her blood sugar level six to 10 times a day, had lesser insulin injections. After two weeks, she did not need insulin jabs anymore because her body is producing insulin now, Naples Daily News reports.

Peacock is the first patient to undergo the new procedure that the Diabetes Research Institute performed. Tami Balavage, a mother with a son who has type 1 diabetes, created the Naples Diabetic Conference and established the Help a Diabetic Foundation.

Dr Todd Brusko, Peacock's doctor and an immunologist at the University of Florida, is a board member of the foundation. However, David Baidal, a doctor on the transplant team, points out being free of diabetes symptoms is not same as being cured of the chronic ailment. He says science is still limited by anti-rejection medication.

The pills are still needed by the body to prevent it from destroying the transplanted islets. The procedure that Peacock underwent is just the first step which opens many doors.

Dr James Shapiro, who perfected the islet cell transplant procedure, says they have cured diabetes in mice 91 percent of the time they have performed the procedure. Shapiro, Canada research chair in Transplantation Surgery and Regenerative Medicine at the University of Alberta's Faculty of Medicine & Dentistry, published the study titled "A prevascularized subcutaneous device-less site for islet and cellular transplantation" in [Nature](#) journal, A Sweet Life reports.