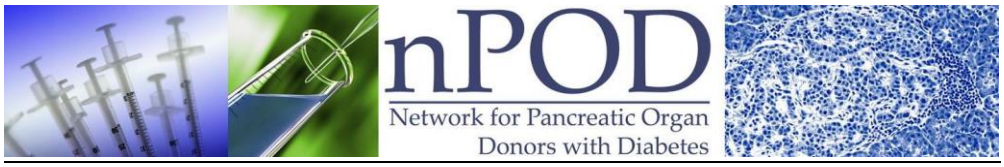

JDRF nPOD Part II: Support research through organ donation

Now that you've learned about Anne's story of donation, I want give an example of the diabetes research that benefits from organ donation.

The Network for Pancreatic Organ Donors with Diabetes (nPOD) is a collaborative type 1 diabetes research project funded by JDRF. nPOD supports scientific investigators by providing, without cost, rare and difficult to obtain tissues beneficial to their research. nPOD currently supports over 120 type 1 diabetes-related scientific studies at institutions around the world, to provide a useful resource to the community of researchers dedicated to finding a cure for type 1 diabetes.

Why is nPOD so important? Scientists have cured the type 1 diabetic mouse over 500 different ways but these cures do not translate to human cures. nPOD scientists are looking at what is happening *within* the tissues impacted by the immune system to see what cells are active at the time of beta cell destruction. Peripheral blood studies cannot capture this level of detail and it is critical to study human tissue. We really want to stress that we need the combination of blood samples from living patients in clinical trials and tissue from deceased donors if we are to make progress on combatting this disease. Most of our scientists are working with *both* patient clinical trials *and* then testing new theories of beta cell destruction within the anatomical donations made to nPOD.

Three Important Findings from the nPOD study so far:

1. nPOD studies show that insulin-positive beta cells can be present for many years after diagnosis. If beta cells persist, maybe we can find a way to stop inflammation at diagnosis and preserve some beta cell function, thus reducing or stopping complications.
2. Analysis of the nPOD samples suggests there may be a link between enteroviruses with T1D. Enteroviruses (EV) are common viruses; there are more than 100 types. Most people infected with EV have no symptoms or only mild symptoms, but some infections can be serious. Importantly, signs of enteroviral infection are seen also in those nPOD donors with a longer duration of disease. This finding suggests a persistence of a viral infection or by the occurrence of multiple infections over time. This research may lead to a vaccine development and clinical trials.
3. nPOD studied the pancreas weights of healthy individuals compared to people in various stages of type 1 diabetes. They found that a T1D pancreas has reduced weight compared to those of nondiabetic donors. The research suggests that the size and structure of a pancreas may be different in those that are on their way to developing type 1 well before they get the disease.

All of this research depends on organ donors, people with type 1 diabetes that are willing to say "yes" to giving the gift of life for future generations. Please sign the nPOD organ donor card to alert first responders in the unlikely event of a life threatening emergency. Then be sure to sign up with your state's registry to be an organ donor today.
