Factors to consider before undergoing Total Pancreatectomy with Autologous Islet Cell Transplantation

Removal of the pancreas for symptoms of chronic pancreatitis is a serious decision. The consequences of living without a pancreas must be weighed against living with the symptoms of pancreatitis.

Not all patients are eligible for the procedure. Results vary depending on the condition of the pancreas at time of transplant. In approximately 50% of patients, the islet cells will eventually make insulin, some even enough to allow independence from taking insulin.

All patients anticipating total pancreatectomy should consult with a nutritionist, an endocrinologist and with a pain management specialist. Even with a successful islet cell transplant, all patients should expect to manage their blood sugar with insulin for a time after surgery, until the islets start producing insulin.

Our center has a network of patients who have successfully undergone this procedure. If you are interested in learning more, please call (212)305.9441.
Patients suffering from severe, end-stage, Chronic Pancreatitis and are considering Total Pancreatectomy may benefit from Autologous Islet Cell Transplantation.

A total pancreatectomy is the surgical removal of the entire pancreas. Depending on the cause for the pancreatitis and the duration of symptoms, removing the pancreas leads to improvement or resolution of the pain in more than 90% of cases.

The function of the pancreas is to produce digestive enzymes and hormones - including insulin. Once the pancreas is removed, the patient loses his/her ability to produce insulin, resulting in “surgical” type IIIc diabetes.

Autologous islet cell transplantation may prevent the development of diabetes in some patients who have undergone total pancreatectomy.

What is Autologous Islet Cell Transplantation?

In autologous islet cell transplantation, Islet of Langerhans cells, which normally produce insulin within the pancreas, are isolated from the surgically removed pancreas and made into a solution.

New York Presbyterian/Columbia University Medical Center is one of the premier hospitals in the nation for the treatment of a wide variety of complex diseases. Columbia pioneered the advancement of allogeneic islet cell transplantation (from cadaveric donor organs) for the treatment of type I diabetes; on this foundation we have built a center for autologous islet cell transplantation (using a patient's own islet cells) for patients undergoing total pancreatectomy. This is a highly specialized procedure only available in very few centers across the nation.

At NYP/Columbia we believe that the best care for complex diseases such as chronic pancreatitis involves a multidisciplinary care approach. All of our patients are discussed at our weekly Pancreas Conference, involving gastroenterologists, surgeons, nutritionists, radiologists, and oncologists. For each unique case, complex decision-making is therefore often a consensus for best approach.

For more information on our cutting edge program, please visit our website at pancreascenter.com.

I and all of my colleagues and support personnel are always available for your needs.

Beth Schrope, MD, PhD, FACS
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