



Cleveland Clinic's Pancreas Transplant Program unites many of the nation's leading specialists in the field. This is one of the many reasons why the program is consistently ranked among the best in the nation. Established 20 years ago, the program's joint kidney and pancreas transplant program has completed more than 300 pancreas transplants. While this may seem to be a modest number, it actually reflects a substantial amount of experience given the relative rarity of the procedure among national institutions.

Our multidisciplinary team of nearly 40 dedicated transplant specialists includes surgeons, physicians, specialist nurses, pre- and post-transplant coordinators, social workers, financial advisors and administrators – all highly trained, extensively experienced specialists who are dedicated to putting the patient first.

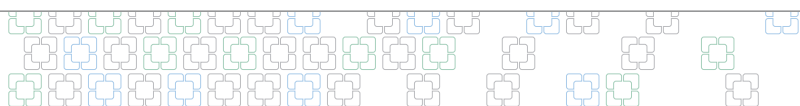
Together, our experts offer:

- An introduction to members of the team who will be conducting the procedure and follow-up
- Comprehensive evaluation of the patient's immune system and general health
- Assessment of kidney and pancreas function
- Development of a personalized plan for pre-transplant preparedness, being notified of the potential availability of an organ, the surgical procedure, beginning an immunosuppressive regimen and follow-up care
- Financial evaluation and assistance

Who needs a pancreas transplant?

Pancreas transplants are most commonly necessary in patients with Type 1 diabetes, although the procedure can be conducted in selected patients with Type 2 diabetes. In Type 1 diabetes, the body's immune system, for reasons as yet unknown, attacks and destroys beta cells in the pancreas. These cells produce insulin, a vital molecule that ferries glucose to cells throughout the body. Glucose is the fuel that energizes cells.

A pancreas transplant is not a first-line treatment. The vast majority of Type 1 diabetics manage their glucose levels through a disciplined regimen of glucose monitoring and insulin injections.



However, many patients with diabetes still have uncontrolled blood glucose control despite optimal medical therapy. These are the patients that pancreas transplantation would benefit the most.

Who is eligible for a transplant?

Each patient's eligibility for pancreas transplant is considered on an individual basis. In general, patients may be considered eligible for a pancreas transplant when:

- Standard diabetes control measures begin to fail
- Insulin reactions appear and begin to increase
- Blood sugar control weakens

What factors make someone ineligible?

- Recent history of cancer
- Untreated, active infections
- Severe lung disease
- Extreme obesity
- Severe vascular disease
- Severe heart disease
- Poor lifestyle habits (tobacco use, alcohol and drug abuse)

What happens once you are approved for transplant?

Once a patient is determined to be eligible for a transplant, he or she is placed on the deceased donor waiting list. While Cleveland Clinic's success rate for the procedure is extremely high, a transplant is still considered a major operation and is never taken as being routine by the specialists performing the procedure. The donor's pancreas and kidney (if receiving a combined transplant) must be healthy and its tissues need to be carefully matched to those of the recipient to minimize the risk of rejection. One of several reasons that Cleveland Clinic's outcomes are so successful is that its specialists are very selective in evaluating donor organs.

Here is a closer look at what you can expect:

- Candidates for transplant usually wait approximately one to two years
- The surgical procedure lasts about three hours
- The transplanted pancreas usually begins to function within minutes, producing insulin in amounts sufficient to control blood glucose within hours
- Patients usually are released from the hospital within two weeks and frequently within one week
- Current patient survival is 100 percent at one year
- Organ survival is 95 percent at one year. (In instances of organ rejection or failure, patients return to their insulin regimen and may be eligible for a second transplant.)

- The risk of transplant rejection increases by about 1 percent a year. (Transplant rejection does not affect a patient's lifespan.)

What happens after transplant?

A successful transplant accompanied by organ acceptance is considered to be a cure for Type 1 diabetes. Although patients will be asked to continue monitoring their glucose levels following transplant, it will be less frequently and continue decreasing as the transplanted pancreas stabilizes. A successful transplant also will give patients freedom from strict diets and routine insulin injections. The new organ may stop ongoing damage to other organs, but there is insufficient evidence to determine if damage already present will be repaired.

Following the procedure, the patient will be required to follow a strict multidrug regimen that includes agents that minimize the immune system's response to the transplanted tissue. Among these are tacrolimus (Prograf®), mycophenolate (Cellcept®), and prednisone, a corticosteroid. Multiple medications also will be prescribed to fight infections, such as sulfamethoxazole/trimethoprim (Bactrim®) and valgancyclovir (Valcyte®).

The regimen must be followed carefully for life, with the understanding that these are powerful drugs that can be accompanied by a variety of side effects. Nevertheless, patients report that they much prefer the drug regimen to the insulin regimen and that their quality of life is substantially improved.

Following a successful procedure, a lifetime routine of follow-up visits is designed with each patient's individual needs in mind. The physician and patient will work together to craft a plan of continued care to optimize the benefits of the transplant and optimize quality of life.

Contact us:

For more information, please contact the Kidney and Pancreas Pre-Transplant office at 216.444.6996 or toll-free at 800.223.2273, ext. 46996.



Every life deserves world class care.

9500 Euclid Avenue, Cleveland, OH 44195

The Glickman Urological & Kidney Institute is a world leader in treating complex urologic and kidney conditions in adults and children. Our physicians have pioneered medical advances including partial nephrectomy, laparoscopic, robotic and single-port urologic surgery, and research on the bioartificial kidney, while serving tens of thousands of patients annually. The Glickman Urological & Kidney Institute is one of 26 institutes at Cleveland Clinic, a not-for-profit academic medical center ranked among the nation's top hospitals (*U.S. News & World Report*), where nearly 3,000 physicians in 120 specialties collaborate to give every patient the best outcome and experience. clevelandclinic.org