

KIDNEY AND KIDNEY-PANCREAS TRANSPLANTATION

Background

The incidence of kidney failure is continuing to increase, and it is now estimated that almost 2 million Canadians have chronic kidney disease. Each day, about 12 Canadians learn that their kidneys have failed, and that they need either dialysis or a transplant to survive.

For medically suitable patients, kidney transplantation is often the preferred treatment. Patients with a well functioning transplant generally live longer, have more energy and are able to return to a more normal lifestyle with no fluid restriction or need for dialysis. Because of these excellent results, the demand for transplantation continues to increase.

Deceased Donor

Patients can receive a kidney for transplant from either a deceased donor or a living donor. Many families make the generous decision to donate a loved one's organs when they die. However, less than 3% of all Canadians who die are suitable organ donors. Unfortunately, there have never been enough donated organs, yet the number of patients waiting for transplantation continues to rise. Patients can wait 2-5 years or longer for an organ to become available from a deceased donor.

Living Donor

Living donation offers many advantages for the kidney recipient, including a reduced waiting time for transplant and a significantly reduced ischemic or storage time. The living donor kidney does not need to be stored or transported a distance. These advantages usually result in a higher success rate. The waiting time is about 3-6 months. Sometimes, a pre-emptive transplant can be done so the patient does not have to begin dialysis. This option is only available if you have a living donor. Living donation permits patients and their donors the opportunity to plan the transplant around their personal and professional obligations. Living donors can be close or distant family members, spouses, and even close friends. They are carefully evaluated to ensure they are compatible with the recipient's blood type and are medically suitable to donate. Living donors can live normal lives following donation of one of their kidneys.

Kidney-pancreas Donor

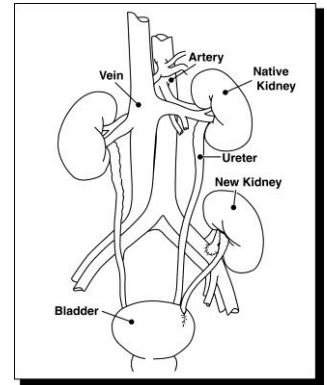
A treatment option for patients with both Type I diabetes and kidney failure is a kidney-pancreas transplant. A kidney-pancreas transplant eliminates the need for insulin and dialysis, dramatically improving the lives of patients who have Type I diabetes. Combined kidney-pancreas transplant is only possible with a deceased donor.

Success

Recipients generally do very well following transplantation with success rates greater than 90% for kidney transplants and 80% for kidney-pancreas transplants. Kidneys from deceased donors often last on average 10 to 12 years, and kidneys from living donors 12 to 20 years. Of course, these times will vary among patients. Our longest-surviving kidney recipient is still well 32 years after her deceased donor transplant.

Surgery

The transplant procedure places a healthy kidney from either a deceased or living donor into you. The new kidney is inserted into your lower abdomen and the artery and vein of the new kidney are connected to your artery and vein. Your blood then flows through the new kidney and makes urine the same way your own healthy kidneys did at one time. Your original kidneys are left in place unless they are causing a problem, such as infection or uncontrolled hypertension. In patients receiving a kidney pancreas transplant, the kidney is located on the left side with the pancreas on the right side of the abdomen.



After Transplant

Following the transplant, patients must take anti-rejection medication to prevent their immune system from rejecting the kidney. These medications increase the risk of infections, cancer, bone disease and diabetes. Although complications can arise, efforts are made to minimize risks by frequent review of the patient, careful monitoring of symptoms, and adjustment of the drugs. The majority of recipients do extremely well with a return to normal life. Transplantation is not a cure for kidney disease, but is an excellent treatment option for most patients. Less commonly, the donated kidney does not function in the recipient due to rejection, recurrence of disease or surgical concerns.

Initial Steps

Once your Nephrologist orders the transplant assessment, there are several steps that must be followed to complete the initial work-up.

1. Written proof of drug coverage. Patients will receive a letter from the health care team regarding the medications that may be required after transplant. Please take this form to your private insurer to confirm coverage or complete an application to Trillium. You can obtain a Trillium application through your pharmacy. You will be automatically covered if you are over the age of 65 or of native status or already covered by Ontario Drug Support Program (ODSP).
2. Dental clearance. Patients will receive a dental form to be completed by your dentist. Following the transplant, you will be on anti-rejection medications, which may increase your susceptibility to infections. Frequently, the mouth is a source of infections. To minimize these risks after transplant, your dentist needs to assess you and clear you for proceeding with the transplant.
3. Preoperative questionnaire. Patients will receive a preoperative questionnaire that needs to be completed and returned to the health care team.

There are a number of investigations that will be arranged by your health care team, including:

Additional Investigations

- routine blood work and virus testing (HIV, hepatitis, CMV, EBV, PSA in males, etc.)
- chest x-ray, ECG; some patients require a stress test and/or echocardiogram
- pap smear yearly; over age 40: yearly mammogram, stool specimens
- abdominal ultrasound
- social work assessment
- TB skin test

It may be necessary for some patients to lose weight and stop smoking before their transplant. Patients being considered for a kidney pancreas may require some additional testing and consultation.

**LHSC
Transplant
Assessment**

Once the package has been completed, it is sent to The London Health Sciences Centre's Transplant Program. Appointments are scheduled over a two-day period to meet the transplant team members. These appointments will include consultation with

- Transplant Nephrologist
- Transplant Surgeon
- Transplant Coordinator
- Anaesthetist
- Social Worker
- Transplant Lab (for blood work)

These appointments provide the opportunity for individual discussion regarding the risks and benefits of transplant. This is a good opportunity for you to have all of your questions and concerns regarding transplant addressed. You may require additional testing following your assessment. In most cases, these can be done in your own community.

**Notification
of
Acceptance**

Following completion of the transplant testing, a decision will be made regarding your suitability for transplant. You will receive a letter from the transplant team to confirm that you are now on the list. It is important that we have contact numbers where you can be reached when a kidney or kidney/pancreas becomes available for you. You will also be given a pager at this time. Bell Mobility supplies the pager.

**More
Information**

If you want more general information about living donation and transplantation, please contact the Renal Transplant Program office at 685-8500 ext. 33354 or check out LHSC's transplant website, www.lhsc.on.ca/About_Us/MOTP/. If you wish to speak directly to the Recipient Coordinator, please call Mary Anne Henry at 519-663-3851 or the Living Donor Coordinator Diane Smith at 519-685-8500 ext. 32331. In addition, The Kidney Foundation of Canada (1-866-390-7337) offers a Peer Support Program and can arrange for you to speak with a donor or recipient about their experience.

Consider registering to be an organ donor and talking to your family about your wishes pertaining to organ and tissue donation. More information can be obtained through the Trillium Gift of Life Network at www.giftoflife.on.ca or by calling 1-800-263-2833.