



London Health Sciences Centre
Multi-Organ Transplant Program

Kidney Transplantation

Patient Handbook After Your Kidney Transplant

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Congratulations on receiving your kidney transplant.

This is a new chapter in your journey to a healthy life. This Education Booklet will help guide you through this journey. Your Transplant Team will work through this booklet with you and you can keep it as a resource for any questions in the future.

Patients are usually in hospital for 4 to 6 days after receiving a kidney transplant. During this time, the Kidney Transplant Team will assist you with your recovery. While the Kidney Transplant Team is key in your recovery, you and your family are important members of your team. You need to be actively involved in making your kidney transplant as successful as it can be.

Your personal support team is very important during this stage of your recovery. While it is ideal to have your support person with you as much as possible, this may be difficult as they are planning around everyday life, including work. The really important times for your support person to be off work and available at the hospital are:

- 1) During surgery
- 2) Time of discharge from the hospital
- 3) During your outpatient stay in London

It is helpful if your support person can attend as many of your education sessions as possible.

Education is one of the keys to helping you have a successful outcome. You will learn how to manage the changes in your life, including medications, diet and exercise. You will become familiar with potential complications that come with transplant, how to identify them and when and how to get help when needed. You will learn the importance of working with your family doctor and your Transplant Team in keeping you healthy.

Let's Get Started on your Road to Recovery!

Your Education Plan

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Discharge Checklist

- ☐ I understand how to properly take my medications and what they are for.
- ☐ I know the symptoms that may indicate I have an infection or a rejection.
- ☐ I understand potential complications of transplant and how to prevent them when possible.
 - ☐ Diabetic Care if applicable
- ☐ I have a thermometer.
- ☐ I understand how to care for my incision and/or drains.
- ☐ I know how to contact the transplant team if I have any concerns.
- ☐ I have my follow-up appointment for Nephrology Clinic
- ☐ I have my follow-up appointment for Surgery.

Clinic Checklist

- ☐ Bring your Transplant Binder.
- ☐ Bring your anti-rejection medications and a list of your other medications– your pharmacy can give you a list.
- ☐ Do **NOT** take your antirejection drugs the morning of your Clinic appointment.
- ☐ Have your blood work taken before Clinic and then take your antirejection drugs.
- ☐ Have questions ready for your doctor – it can help to write them down so that you won't forget to ask.

□ Lines and Tubes

Central Intravenous Line

A line is inserted by the anesthetist into a neck vein while you are asleep in the operating room. It provides us with intravenous access to give fluids and medications. This line is usually in for two or three days after surgery but can be in for longer. The line will only be removed when safe to do so.

Peripheral Intravenous (IV) Line

You will have at least one IV in your arm. This provides additional access for giving IV fluids until you can eat and drink. Medications can also be given through this line. You may require additional IVs to be inserted during your hospital stay– this will be explained to you at the time if needed.

Arterial Line

This is a small line inserted into an artery. It is put in during the transplant surgery to measure your blood pressure and to draw blood samples. It may stay in place for 24 hours.

Heart Monitor

You will be attached to a heart monitor for the first 24 hours in the Transplant Unit to monitor your heart's rate and rhythm.

Foley Catheter

During surgery, a small plastic tube (Foley Catheter) is inserted through your urethra (where you pee) into your bladder. It prevents your bladder from filling up with urine, and allows the new ureter (that has been sewn to your bladder) time to heal. The catheter is usually in place for at least five days and occasionally longer. The urine produced by your new kidney will contain blood for several days after your surgery.

Ureteric Stent

Your surgeon will place a ureteric stent at the time of your kidney transplant. This is a flexible tube that is placed in the ureter between the new kidney and the bladder. It acts as a scaffold over which your ureter heals. It will be removed about four weeks after your transplant surgery (see page 7 for more detail). The removal procedure is done by your surgeon in the Outpatient Clinic. It takes about 5 minutes and is done under local anesthetic. You will be given an appointment for the procedure prior to your discharge from hospital.

Oxygen

During surgery, the anesthetist placed a tube in your airway to assist you with breathing. This tube is removed in the Operating Room after your transplant is complete. Patients often require oxygen through a mask or nasal prongs after the tube is removed. The amount of oxygen you receive will depend on the level of oxygen in your blood. This level is measured through a probe placed on your finger.

Sequential Compression Device

Sequential Compression Devices (SCD) are “sleeves” that wrap around the legs and inflate with air one leg at a time. This imitates walking and helps prevent blood clots from forming in your legs. Once you are up walking regularly, the SCDs are no longer needed.

Neuromuscular Electrostimulation Devices “GEKOs”

GEKO’s are adhesive band applied below the knee to stimulate the nerve which activates your foot and calf muscles. It helps to prevent edema (swelling) and improves blood flow to your new kidney. You may feel a tapping sensation/sensation down your leg. Your foot will twitch with this.

Surgical Drains (Hemovac)

Small surgical drains may be inserted into your abdomen during surgery. The drains prevent fluid from collecting in your abdomen. Drains are usually removed within 5 days of your surgery; however, removal of the drains depends on how much fluid they are draining. The Kidney Transplant team will check them daily. More information will be provided by the healthcare team if your drains are still in place at your time of discharge.

** Routine Tests****Blood Work**

You will have blood work every 4-8 hours for the first 24 hours and then daily every morning (between 5-7 AM). until you are discharged. Occasionally, you will need it more frequently, depending on your condition.

Renal Ultrasound

Within the first 24 hours, you will have an ultrasound of your kidney. This is done in your room. This test helps the physician determine how well the blood in your kidney is flowing. This procedure takes about 30 minutes.

□ Pain Control

After transplant, you will have medication to help control your surgical pain. It is expected that you will experience some pain after surgery. However, by properly managing your pain level, you will be able to do activities important to your recovery, such as walking and deep breathing and coughing. As time progresses and you move about more, your pain will improve, and medication will no longer be necessary. Your kidney transplant team will check in with you regularly to make sure that your pain is under control. If required, a prescription for pain medication will be provided before discharge to help you control your pain after discharge home. You may also take Tylenol/acetaminophen for pain control after your kidney transplant, but please continue to avoid any other pain medications in the NSAID family (including Advil/ibuprofen and Aleve/naproxen) as it may be damaging to your new kidney.

Pain medication can be constipating. A gentle laxative will be provided while in hospital and upon discharge home. If you experience constipation after discharge home, talk to your Transplant Team about a safe over the counter laxative option.

□ Wound Care

For the first few days after transplant, you will have a dressing over your incision. When you go home from the hospital, you do not require a bandage over the incision unless it is draining. Occasionally, patients can have complex wounds, requiring nursing care at home for several weeks after their transplant.

Most likely, you will have steri-strips (paper tape) over your incision. You should let these fall off over time. You may trim loose ends, but leave the rest in place until they eventually fall off. Some patients have staples, which will be removed 2-3 weeks after surgery, either in the hospital or during a clinic appointment by the outpatient nurse.

You may shower when you have steri-strips or staples, dabbing gently over your incision with warm water. There is no need to scrub the incision with soap. If you are being discharged with a drainage appliance in place, check with your nurse about specific care instructions. If you notice redness, swelling or unusual discharge from your incision, please let your surgical team know. You should not bathe or swim until all drains have been removed and all wounds are completely healed.

Inspect your incision daily for redness, new or yellow/green drainage, increased swelling, opening of edges, or increased pain. Concerning changes should be reported to the Transplant Surgical Team.

Some patients require an abdominal binder to support the incision. If a binder is needed, it should be worn at all times for the first eight weeks after surgery. You can pay for the binder, **prior** to discharge through the LHSC Business Office. The cost is approximately \$50-80, depending on the size required. There are reimbursement options available; please see your Social Worker, if needed.

☐ Breathing and Coughing Exercises

Your nurse will assist you after surgery with breathing exercises to help keep your lungs clear. Following any major surgery, it is important that your lungs are fully inflated and clear of secretions in order to prevent pneumonia. Within the first 24 hours after surgery, the nurses will encourage you to practice deep breathing and coughing exercises. This may cause you a temporary increase in pain; a pillow or a folded blanket can be used to support your incisional site during this activity.

☐ Mobility

Along with the breathing exercises, your nurses will also help to get you moving. You will be assisted up to the chair in your room with a goal of taking short walks within the first 24-36 hours after surgery. At the beginning, this will be uncomfortable for you, but moving after surgery is critical to speeding your recovery and preventing certain complications like pneumonia or prolonged oxygen requirement. After a day or two, the discomfort associated with movement will subside you will start to feel better. Plan to do your exercises and activities about 30-45 minutes after you have received your pain medications so you can move about more easily with minimal discomfort.

☐ Diet

Surgery affects the normal function of your bowels. You will start by taking clear fluids after surgery, but this will gradually be advanced to a regular diet. You may not feel particularly hungry after surgery. This is normal. Try and eat what you can but do not feel obligated to finish each meal tray at first. Your appetite will return within a few days of surgery. If you feel nauseated, are burping excessively, or have vomited, you should refrain from taking too much food or fluid. Your care team will monitor you closely and make diet recommendations as required. The Kidney Transplant Dietician monitors all kidney transplants patients and will address any issues or concerns you may have.

After surgery, you may find it easier to eat 6 small meals per day rather than 3 large meals. Your meals should be nutritious and contain protein. Protein is important for healing and regaining strength after surgery. You should also be drinking 2-3L of fluid a day. This can be difficult for many kidney transplant recipients as fluid restrictions are common while on dialysis. Ensuring an adequate fluid intake after your transplant is critical to the health of your new kidney. In addition, drinking adequate amounts of fluid each day can help with constipation after surgery. Do NOT include coffee, tea or cola beverages as part of your daily fluid consumption.

☐ Daily Routines following Transplant

You will have a kidney transplant pathway posted on your wall. This will help you to know what to expect each day. Your nurse will help you work through each step of the pathway. The Kidney Transplant Team will check on you progress on the pathway each day.

☐ Life after Dialysis

Fistula and Gore-Tex graft

It is quite common for fistulas and Gore-Tex grafts to stop functioning after transplantation. You may experience some tenderness in your fistula or graft and then notice that it has stopped working. This should be reported to your nephrologist. As long as your new kidney is working well, no action will be taken to get the fistula or graft working again.

PermCath catheter removal

If the transplanted kidney is working well, we will arrange for the PermCath to be removed in the week or two following transplant. Therefore, you will need to continue with weekly dressing changes until that time. Weekly flushing may also be required and will be communicated with you if necessary.

Peritoneal dialysis (PD) catheter removal

If the transplanted kidney is working well, we will often recommend that the PD catheter be removed approximately one to two months after the transplant. If you wear a dressing, you will need to continue with regular dressing changes. In some cases, the PD catheter will be removed during the transplant surgery.

Commented [EW2]: Shelley: I would check with Dr.G about this- our policy right now is to only do weekly dressing changes and not flushes:re risk of infection. CCAC is now called Ontario Health at Home and they do not do permcath flushing. If the doctors want to flush weekly and dressing changes they will have to arrange with the dialysis unit to do this.

Commented [EW2R2]: Confirmed policy with Dr. G

Kidney Transplant Clinical Pathway					
POD	Consults / Milestones	Bedside Care	Plan	Interventions	Other Comments
POD 0		☐ Vitals signs q 4h ☐ Catheter monitoring x 24hrs ☐ Night duty ☐ Intake/Output q 4h ☐ CVP q 4h	☐ Check Fluids ☐ Check GUN TID	☐ Bedside nursing ☐ Mobbing to chair ☐ OCKID for all D/C and recipients at risk of D/C in 30/60 per Urology	
POD 1		☐ Vitals signs q 4h ☐ D/C Catheter monitoring ☐ Night duty ☐ Intake/Output q 4h ☐ D/C CVP ☐ D/C fluids (based on drainage - patient dependent) ☐ Round assessment ☐ Rehydrate dressing as needed	☐ D/C ☐ Check GUN TID (until gas passed)	☐ AAU ☐ Chair for meals ☐ Walk at	☐ Introduce medications
POD 2	Consult: ☐ Social Work ☐ Physiotherapy if indicated	☐ Vitals signs Q4 ☐ Night duty ☐ Intake/Output Q4 ☐ D/C CVP ☐ Round assessment ☐ Dressing change above post-op OR D/C dressing to all if dry	☐ D/C	☐ AAU ☐ Chair for meals ☐ Walk at	☐ Make patient EUP sheet ☐ Introduce SLP ☐ Medication review ☐ Social Work will review drug coverage and patient supports including notes re out patient clinic appointments ☐ Social Work to complete OP Pharmacy form
POD 3	Consult: ☐ Pharmacy ☐ Catheter if indicated ☐ Bloodwork if required	☐ Vitals signs Q4 ☐ Night duty ☐ Intake/Output q shift ☐ Round assessment ☐ PIV at noon Foley removal	☐ D/C	☐ AAU ☐ Chair for meals ☐ Walk at	☐ Nursing Education - Infection and Repetition ☐ Patient's SLP ☐ Intake D/C Plan ☐ Call surgery if PWR patients
POD 4	Consult: ☐ CCAC if required	☐ Vitals signs Q4 ☐ Night duty ☐ Intake/Output q shift ☐ Round assessment	☐ D/C	☐ AAU ☐ Chair for meals ☐ Walk at	☐ Review Nutrition Infection and Repetition ☐ Patient Independent with SLP ☐ Review D/C Plan ☐ GP Clinic Checklist ☐ Assess need for Home Care ☐ CCAC referral / Foley remains in ☐ Recipient must have Bld before D/C ☐ Pains catheter should be removed prior to D/C
POD 5		☐ Vitals signs q shift ☐ Night duty ☐ Intake/Output q shift ☐ Round assessment	☐ D/C	☐ AAU ☐ Chair for meals ☐ Walk at	☐ Review Catheter Checklist - remove catheter when appropriate ☐ Discharge planning, GP Clinic appointment and review if Clinic Checklist

Anti-rejection Drugs



Your transplant nurse and pharmacist will help you learn your new medications, their names, what they look like, what they do, and when to take them. This is called the self-medication program (SMP). This program includes teaching handouts and videos.

The Patient Medication Videos can be found on line:

- Go to www.lhsc.on.ca
- Click **Programs & Services** from the menu bar along the top of the page
- Select **Multi-Organ Transplant Program** or **Transplant Program**
- Under **Patients, Families & Visitors** in the left hand menu, select the appropriate organ transplant group
- Select **Medication Information** from the menu options to access medication resources



In preparation for your discharge, the doctors will write your prescriptions for the medications you will need to take at home. You will also be provided with an up-to-date list of your medications at discharge. . You should know each drug's brand name (the company name) and the generic name.



We strongly recommend that you have these first prescriptions filled at our hospital pharmacy, which is located in the main lobby. This is because the pharmacy always keep transplant medications in stock and is familiar with the billing of these medications. The University Hospital Prescription Centre is open Monday to Friday 9:00 a.m. to 5:00 p.m., excluding statutory holidays. The telephone number is 519-663-3231. After your first prescription is filled, future

prescriptions can be filled at the pharmacy of your choice. Transferring prescriptions to your preferred home pharmacy is easy, just ask your transplant pharmacist or community pharmacist for more information.

Community pharmacies may not always stock the brand name anti-rejection drugs you need. Shortly after returning home, you should speak to your community pharmacist and tell them what medications you are taking. They may be able to order your anti-rejection drugs, but it will probably take a few days. You need to give your pharmacist lots of notice when you are running short on medications.

It is important that you never run out of medicine. It is recommended to have at least 2 weeks' worth of medication on hand at all times.

If you need financial help in obtaining your medications, please speak with the Pharmacist or Social Worker concerning this issue.

No matter how long it has been since your transplant, there is always a risk of rejection and losing your kidney. **NEVER STOP TAKING YOUR MEDICATIONS OR CHANGE THE DOSAGE WITHOUT YOUR TRANSPLANT TEAM'S APPROVAL.**

Medication	Start Date:															
1. Advagraf (Tacrolimus ER) 	Day:	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat
		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14
8:00 AM																
Take once a day: The dose may change daily depending on your blood work – you may be asked to skip a day. <ul style="list-style-type: none"> • This is an Antirejection Drug • Pills available in 5mg, 1mg and 0.5mg doses • Take at same time every day • Don't let anyone else touch the pills with their bare hands • If you vomit within 30 minutes of taking the pills, take the pills again. If it is more than 30 minutes, do not take the pills again. • You have up to 14 hours to remember to take your pills if you have forgotten a dose. If it is longer than 14 hours, skip the dose and take your next dose at your normally scheduled time. • Do NOT take before you have your blood drawn on Clinic days – Your blood work needs to be done before you take Advagraf. Bring your medications with you to your Clinic visit. • Side Effects: Tremors 																
2. Mycophenolate Sodium (Myfortic) 	Day:	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat
		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14
8:00 AM																
8:00 PM																
Take twice a day. <ul style="list-style-type: none"> • This is an Antirejection Drug • Don't let anyone else touch the pills with their bare hands • If you vomit within 30 minutes of taking the pills, take the pills again. If it is more than 30 minutes, do not take the pills again. • You have up to 6 hours to remember to take your pills if you have forgotten a dose. If it is longer than 6 hours, skip the dose and take your next dose at your normally scheduled time. • Side Effects: This drug may cause your stomach to be upset or cause heart burn. You may get diarrhea. Please tell your Transplant Team if you have any problems with this. 																
3. Prednisone 	Day:	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat
		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14
8:00 AM																
Take once a day: This will be a tapering (slowly decreasing) dose. <ul style="list-style-type: none"> • This is an Antirejection Drug • The pills come in 1, 5 or 50 mg pills – you may have to mix and match and take many pills to get the right dose for you. • Side Effects: This drug does not taste good. You may be more emotional than usual. It may cause you to be short tempered or anxious. It can cause weight gain. 																

❑ Medication Tips

- ✓ To prevent rejection of your new kidney, anti-rejection drugs are necessary. You will need to take these drugs for the rest of your life.
- ✓ It is very important to learn the names of these drugs, what they do, and possible side effects. You should know each drug's brand name (the company name) and the generic name. View the medication videos prior to being discharged and speak to the pharmacist about any concerns with your medications.
- ✓ These drugs must be carefully monitored (through blood work) especially in the first months after transplantation to ensure you are getting the correct dosage.
- ✓ If your antirejection drugs include Tacrolimus, Sirolimus or Cyclosporine, you **MUST NOT** take the medication before having your blood tests to measure your drug levels. Bring your medication to the hospital and take it immediately after your blood is drawn.
- ✓ Check with your pharmacist before taking any non-prescription medications, such as cold capsules, aspirin, cough syrups, vitamins, and herbal remedies. Other medications can affect how well your anti-rejection drugs work.
- ✓ Cannabis products may affect your transplant medications. Let the Transplant Team know if you use any marijuana products.
- ✓ It is strongly recommended that you don't eat or drink products with grapefruit and pomegranate due to drug interactions.
- ✓ If you miss a dose of your anti-rejection medication, the general rule is to take the missed dose when you remember. Check your medication sheet for specific instructions.
- ✓ If you vomit within 30 minutes of taking your medication, repeat the dose when your stomach settles. If you are unable to keep your medications down or have persistent vomiting please proceed to your local emergency department for assessment.
- ✓ Make sure you always have two to three weeks' worth of medication on hand. Do not allow your prescriptions to run out.
- ✓ Before clinic visits, check to see if you need a refill on any prescriptions. The label on your medication package indicates if there are refills still available.
- ✓ The transplant team can **ONLY** give you a prescription for anti-rejection medications if they are following you and see the results of your blood tests. If you do not have bloodwork done regularly and do not see a physician, the transplant doctors can **NOT** write a prescription for you.
- ✓ When on vacation, take enough medication with you to last well beyond the time you plan to return home. If you travel by air, carry your medication in hand luggage rather than in checked luggage. Carry a list of your medications with you.
- ✓ Store medications at room temperature, away from direct heat or cold and always away from children's reach.

Vaccinations

After your transplant, you will be on medications that suppress your immune system. You are at a higher risk for infections and will benefit from immunization.

Patients are encouraged to get the necessary vaccinations while waiting for transplant. This is important as not all vaccinations are safe to be given after transplant.

Tips about Vaccinations:

- ✓ Some vaccines are not required after transplant if you have been vaccinated before your transplant. When sorting out which vaccinations are needed, it is helpful to know which ones you've had – [Bring your vaccination records with you to Clinic](#).
- ✓ If you have had your spleen removed, check with your doctor about your vaccinations.
- ✓ The flu shot is recommended for transplant patients. If you receive your transplant during flu season, wait 1 month after your transplant before having the flu shot.
- ✓ Wait 3-6 months after your transplant for all other vaccinations.
- ✓ All vaccines are covered by OHIP apart from SHINGRIX (unless you are between 65 – 70 and have not received Zostavax) and HPV. These may be covered by some private insurance plans.
- ✓ **Transplant patients should NOT receive live vaccines.**
- ✓ COVID-19 vaccines are an important defense against COVID infection – get the vaccine and boosters as they become available. COVID-19 vaccines are indicated in a three dose vaccine series (if you have never had a COVID-19 vaccine.) Those are preferably given before your transplant. If you are unable to get it before, then you should get it after your transplant. Check with your transplant team beforehand. Refer to [Service Ontario](#) for more information.

Infection	Recommended Vaccine	Cautions
COVID-19	Either Pfizer-BioNTech or Moderna is acceptable. If you have never received ANY COVID vaccines, 3 doses are considered a primary series. You should receive booster doses as they become available. Timing of doses should follow Ontario guidelines. For patients unable to receive an mRNA vaccine, the Novavax Nuvaxovid vaccine may be an option.	It is preferred that you not receive any other vaccines 2 weeks before or 2-4 weeks after each dose. Your transplant team may recommend you have other vaccines during this time if it is needed (e.g. travelling to a country where other vaccines are necessary). If you have had a recent COVID infection it would be okay to postpone your booster for up to three (3) months. (While general consensus varies, in the peak season waiting up to four (4) weeks may be reasonable,

		rather than three months.) As always, talk to your transplant team. COVID boosters are no longer recommended at a higher frequency than every 6-12 months however the upcoming booster contains coverage against the most recent strains so getting a booster pre-travel may be advisable.
Influenza (the flu)	<u>Get the flu shot!</u> High dose (one-time dose) is preferable for all post-transplant patients, even those under 65 years old. If a single, high dose is not available, then two regular doses, one month apart is appropriate.	Do NOT use live inhaled flu vaccine.
Pneumonia	<u>Prevnar®20</u> (Conjugate vaccine) – single dose. If you were previously vaccinated with either Prevnar®13 or Prevnar®23 as your first dose, you can have Prevnar®20 as your second dose.	This vaccine is not required again if you were vaccinated before transplant.
Shingles	<u>SHINGRIX</u> – 2 doses, 2 months apart You can still get the SHINGRIX vaccine 6 months after you have had Shingles. Do NOT use Zostavax – this is a live vaccine.	This vaccine is not required again if you were vaccinated before transplant. SHINGRIX is only covered by OHIP for people between the age 65-70 and if you have not received Zostavax. It may be covered by some private insurance plans.
Tetanus, Diphtheria, Pertussis	<u>Tdap Vaccine</u> – required every 10 years There are 2 different Tdap vaccines – either is okay based on your age. Boostrix for people age 10 years and older Adacel for people age 10-64	
Meningitis	There are different types of meningitis and therefore different vaccines. We recommend getting <u>Menactra</u> which covers the most common types of meningococcal groups (A,C,Y,W). <u>Bexsero®</u> covers meningococcal group B. Men-C (<u>Menjugate</u>) vaccine only covers group C (given to those who have had a splenectomy).	It is important to know which type of vaccine you have had – please check with your family doctor.

Haemophilus influenza B	<u>Haemophilus influenzae B vaccine</u> (Hib vaccine)	May be given pre- or post-transplant.
Respiratory Syncytial Virus (RSV)	<u>Arexvy®</u> is the only vaccine available in Ontario currently. If you are 60 years old and have received an organ transplant you are eligible under the Ontario Health High-Risk Older Adult RSV Vaccine Program free of charge. Your physician will need to prescribe the vaccine for you. (If you have private insurance, it may be covered)	It is recommended that the RSV vaccine be administered at least two (2) weeks before or after any other vaccine. Side effects after the RSV vaccine can include pain, redness and swelling where the shot was given, fatigue (feeling tired), fever, headache, nausea, diarrhea and muscle or joint pain. *Until further information is available RSV can be a one-time dose.
Hepatitis B	<u>Hepatitis B vaccine</u> Being vaccinated to Hepatitis B does not mean that you are immune – it may take several boosters. After transplant it may be more difficult to achieve immunity. Your Transplant Team will have checked your immunity level using a blood test. If you are not immune, it is recommended that you get a booster or complete the 3-dose series. Immunity needs to be retested after vaccination. This is not publicly funded after transplant.	
Hepatitis A	If you are planning to travel to a country where Hepatitis A is common, you should be vaccinated. This needs to be done well in advance of your travel. Check with the Transplant Team at least 2 months prior to departure. You will need 2 doses of the vaccine. The last dose needs to be at least 2 weeks before departure.	
Human papillomavirus (HPV)	<u>4-Valent HPV vaccine</u> (4vHPV) is recommended for anyone less than 45 years old. NACI reiterates its current guidance recommending a 3-dose schedule for individuals who are considered immunocompromised, as well as individuals living with HIV. If you are over 20 yrs old, you should receive a two-dose strategy, given at least 24 weeks apart.	It is best given before the age of 26. 4vHPV is not covered by OHIP but may be covered by some private insurance plans.
Measles	<u>Do NOT</u> vaccinate for measles after transplant – MMR vaccine is live vaccine. Protection against measles is usually checked before transplant and MMR vaccine maybe given then if your transplant doctor approves.	

Post-Transplant – Identifying and Preventing Potential Complications

❑ Infection

You will be taking anti-rejection medications which prevent rejection by suppressing your immune system. Although your body is still able to fight infections, you will be more prone to infections especially during the first few weeks after your transplant.

Fever (a temperature $>38^{\circ}\text{C}$ or 100°F) is often the first sign of infection. However, transplant patients do not always present with a fever when they have an infection. Because you are immunosuppressed, your body's reactions to infections may also be suppressed. If you do develop a fever, you need to seek medical attention immediately – either go to see your family doctor or go to your local emergency room. The Transplant Team is always available for consultation.

If you have any other symptoms of infection (listed below) but no fever, you may still have an infection and should seek medical attention.

Signs of infection may include:



- Fever ($38^{\circ}\text{C}/100^{\circ}\text{F}$ or higher) ... generally feeling unwell
- Cough or sore throat, green/yellow sputum, shortness of breath
- Burning sensation when you urinate, foul smell to urine, frequent urge to void
- Redness, pain, swelling or drainage around the incision If an infection is suspected, you should call your doctor

Ways to prevent infections:

- Wash your hands frequently
- Good general hygiene
- Good dental care - see the dentist every 6-12 months
- Healthy lifestyle including rest and exercise
- Nutritious balanced diet
- If possible, avoid direct contact with people who have a cold or infection
- Get your vaccinations as recommended (see vaccination section)



❑ Rejection

The immune system is the body's internal defense system. It protects you from infection (bacteria and viruses) by recognizing and attacking foreign substances. The new transplanted kidney is seen by your body as a foreign tissue so it tries to attack and reject it. This can occur at any time but the risk is greatest during the first few weeks to months after the transplant. It is not uncommon for a transplant recipient to experience a rejection episode.

Some symptoms of rejection may include:

- fever or chills (38°C/100°F or higher)
- fatigue and generally feeling unwell
- pain or tenderness over your new kidney
- decrease in urine output
- swelling in your ankles, feet, hands, or eyelids



You may or may not experience some of these symptoms. Sometimes the only clue is detected by your rising creatinine. This is why it is very important to attend all your scheduled blood work and clinic appointments.

To confirm an episode of rejection, your doctor may want to perform a kidney biopsy. This will provide them with a small piece of your kidney tissue that can be examined under a microscope. Most often, this procedure is done in the ultrasound department. Once your doctor has explained the procedure, staff will ask for your signed consent. Local freezing will be injected at the biopsy needle insertion site. During the biopsy you may feel a tug-like sensation as you hear the click of the biopsy needle. When you return back to your room, you will be closely monitored over the next five hours to ensure there are no complications or bleeding. You will be asked to stay in your bed during this time.

Most rejection episodes are successfully treated. Your anti-rejection medications will be adjusted. Your steroid medication (prednisone) will be stopped for three days while you receive higher doses of steroids intravenously (methylprednisone).

Some other possible treatments for rejection are “PLEX” or Plasmapheresis, “IVIG” or Intravenous Immunoglobulin or Antithymoglobulin. If you require any of these treatments, they will be explained to you.

❑ Delayed Graft Function

Sometimes, after a kidney transplant, the kidney does not work immediately. “Sleepy kidney” can happen because the kidney is “in shock” after being removed from the donor. This is a problem that usually gets better by itself over time as the kidney “wakes up” and begins to work. There is no treatment except to wait for the kidney to start to work on its own. We will continue to check you and your blood tests closely until the kidney starts to work, but you may need dialysis for several days or weeks.

☐ Cancer Prevention

You are at a slightly higher risk of developing cancer as a result of taking anti-rejection medications. Skin cancers are the most common form of cancer after transplant and are commonly found on the back, calves, arms, ears and the back of the neck. Inspect these areas frequently and report any new moles or skin changes to your physician. For useful tips, please see the *Healthy Skin After Transplant Sheet* in the Appendix (page 47).



Always wear sunscreen (SPF of at least 15-30) when you are in the sun. (Do not forget to apply lotion to your ears, face and nose). Reapply the sunscreen frequently – especially if sweating or after drying off from a swim. Avoid the mid-day sun (10 a.m. - 2 p.m.) when the ultra-violet rays are strongest.

It is important that you have yearly check-ups and cancer screening through your family physician. This includes breast examinations, pap smears and prostate exams as applicable. It is recommended that women have a pap smear and mammogram every 2 years, and a stool sample for occult blood testing should be done for women older than 40 years. Men over 40 years old should have yearly prostate check-ups and stool for occult blood.

Another type of cancer is a blood cancer called PTLD, Post-Transplant Lymphoproliferative Disorder. Report any unusual lumps or bumps, unexplained weight loss or night sweats to your doctor.

☐ Dental Care

Because your risk of infection is highest in the months following your transplant, the Transplant Team recommends that you NOT go to the dentist for any procedures including cleaning for the first 3 months after your transplant and, if possible, avoid the dentist for up to 6 months. After this, you should see your dentist every 6-12 months for regular check-ups.



There is no requirement by the Transplant Team that you have antibiotics before any dental procedures. The need for antibiotics is at the discretion of your dentist.

Some transplant medications can increase the risk of gum disease like infections and overgrowth of the gums. It's very important that you take good care of your teeth and gums after your transplant – brush and floss your teeth regularly.

❏ Diabetes/ High Blood Sugars

Glucose, a simple sugar, is the main source of energy in the body's cells. Diabetes occurs if sugar accumulates in your body because either your body is not using it properly or your body is not producing enough insulin. While you may never have had a problem with your blood sugars or diabetes in the past, it is a potential complication following transplantation. This is called new-onset diabetes. Some studies have shown that up to 30% of recipients develop diabetes within 5 years after transplant.

Several things may make you more likely to develop new-onset diabetes including age, ethnicity, family history, obesity and your anti-rejection drugs. Prednisone is associated with the greatest risk of developing diabetes. Tacrolimus may also contribute to developing diabetes.

New on-set diabetes occurs when your body doesn't use insulin properly. You produce insulin but your body is unable to use it effectively. The result is your blood sugar level becomes too high.

What are the symptoms of diabetes?

- Fatigue
- Extreme thirst
- Frequent urination
- Extreme hunger
- Weight loss
- Frequent infections
- Slow wound healing
- Blurry vision

What are the consequences of having diabetes that is not treated properly?

Other than the symptoms listed above that can greatly affect your quality of life, uncontrolled diabetes can increase the risk of complications such as:

- Heart disease
- Blindness
- Nerve damage
- Kidney failure
- Amputations of limbs

How is new-onset diabetes treated?

Diabetes can be treated with:

- Physical activity and a healthy diet
- Oral medication and/or insulin

The type of treatment you receive will depend on your blood sugar levels.

If the Transplant Team suspects that you have new-onset diabetes before you leave the hospital, you will be seen by the LHSC endocrinologist. The endocrinologist will prescribe the best treatment option for you while your transplant pharmacist, dietician, and bedside nurse will assist you in understanding and managing your diabetes.

If new-onset diabetes is suspected during one of your Clinic visits after you are home, the Transplant Team will refer to you a specialist in your community to diagnose and treat you.

Usually, diabetes is not curable. New-onset diabetes after transplant, however may be related to your prednisone or tacrolimus. These drugs are necessary for the health of your kidney. Tacrolimus dose may decrease as time passes after transplant. This means that your blood sugars may eventually normalize and you no longer require oral medications or insulin. It is important that your diabetes be closely followed so that treatment is appropriate for your situation.

❑ Cataracts and Glaucoma

There is an increased risk of cataract formation and glaucoma in patients who are on prednisone for long periods of time. Once you are transplanted, it is a good idea to have your eyes checked yearly.

❑ Bone Disease

Transplant patients have an increased risk of bone disease (osteoporosis), which can increase the risk of bone fracture. To lower your risk, make sure you are getting enough calcium and vitamin D in your diet (unless your doctor says not to). Consult your dietitian for good dietary sources of calcium.

❑ Medic Alert



In an emergency, a Medic Alert bracelet or necklace shows others that you are a kidney transplant recipient. We recommend that you buy a Medic Alert bracelet or necklace as soon as possible. Medic Alert brochures including an application form are available in the Transplant Unit and at most drug stores. You can find more information at the Medic Alert Website (www.medicalert.ca).

Your bracelet or necklace should be engraved with:

Kidney Transplant/Immunosuppressed
(and any other pertinent information like allergies,
diabetes, etc.)

London Health Sciences Centre (519-685-8500)

Discharge and Follow-up Appointments

You are being discharged from the hospital!

The Transplant Team has said that you can go home from the hospital. This is an exciting time but also can be a little frightening.

REMEMBER:

The Transplant Team would not discharge you from the hospital if they did not feel that you were ready to go!

Please feel free to talk to the doctor or the nursing staff about any concerns you may have about going home.

You will be given an appointment to see both your surgeon in the 8th floor clinic and your transplant nephrologist in the 4th floor clinic. Your first clinic visit will be within a few days of your discharge.

After leaving the hospital, out of town patients will need to stay in London for about 4 weeks or until the stent is removed. You will be seen twice a week for 2-3 weeks, then once a week for the next 2-3 weeks to help manage any medical and surgical issues and adjust your medications as needed. As time goes on and you recover, you will be seen much less frequently.



You will need to find accommodations in London for the duration of your stay in London. A list of accommodations is available in the Transplant Unit or on our website (<https://www.lhsc.on.ca/multi-organ-transplant-program/accommodations>). Most local hotels offer a hospital rate to help you with the financial burden you may experience with surgery. If you have any problems with setting up a place to stay, your Social Worker will be happy to help you.

Who do I call if I have problems before my first visit?

There is a list of transplant telephone numbers included at the back of this booklet. It is important that your concerns are addressed as early as possible to prevent them from developing into more serious health concerns. If you are unable to reach the Transplant Team or if the matter is urgent, please go to the closest Emergency Department or call 911.

What happens at my follow-up appointments?

Check in with the Nephrology Clinic Clerk on the 4th floor.

Patients are seen in the Clinic in the order that they register. There are few exceptions to this (e.g. if a patient is feeling unwell or has multiple appointments on the same day).

Blood Work

Next, you will get your blood work done at the Lab Test Centre (Blood Taking) on the 4th floor (Room B4-102). You must arrive no later than 9:30 in the morning to get your blood drawn. This allows us to get your drug levels.

Take a number outside the Lab Test Centre and have a seat. You will be called into the Lab Test Centre by a lab technician and your blood will be drawn.



Blood is taken to check:

- your kidney function tests, electrolytes, and hemoglobin
- your anti-rejection drug levels



To test your anti-rejection drug levels, your blood needs to be taken before your morning dose. It is very important that you do NOT take your anti-rejection medication until after you have had your blood drawn. You should bring your medications to the hospital with you and take them after your blood has been drawn. You may eat and drink normally unless told otherwise.

After you leave the hospital, blood tests should be done twice a week for the first 2-3 weeks and then once a week for the next 2-3 weeks.

Blood work **MAY** be ordered more frequently at the discretion of the Transplant Team depending on the clinical evaluation of your condition.

Remember; do NOT take your antirejection drugs until after your blood sample is taken.

Clinic Visits

Everyone will get a 8:00 AM appointment time. The lab test centre opens as early as 7:00AM but you must be here no later than 9:30AM for your bloodwork. Check in with the nephrology

clinic clerk before blood work on the 4th floor. The clerk will check you in and give you your blood slips to take to the lab test centre. The clerk will also give you a number which the nursing staff will call you into the clinic with after your blood work is completed. Have a seat after your blood work is completed to wait for the nurse to call you in for assessment

It is very important that you update your contact information with the clerk when you check in so that the clinic can contact you with any new information or changes.

A nephrology clinic nurse will call you in by that number and proceed with their assessment. After your nursing assessment is done, you will be asked to go back to the waiting room until you are called in again for your appointment with your nephrologist.

EVERY TIME YOU COME TO THE CLINIC, BRING AN UPDATED LIST OF YOUR MEDICATIONS AND YOUR TRANSPLANT BINDER WITH YOU TO THE CLINIC. Your pharmacist can provide you with this list. The nurse will review your medication list with you and ask if you require any repeat medications. **BRING A LIST OF ANY PRESCRIPTIONS THAT REQUIRE RENEWAL.**

Your visit may require that you remain at the clinic for two to four hours so please be prepared for this wait. It is a good idea to bring something with you to make the wait more pleasant (e.g. water, snack, book, iPad). If you are a new patient, you should also bring an overnight bag with you for the first month. You can leave the bag in your car. It is not uncommon for a patient to be admitted to the hospital for a few days to investigate bloodwork changes. The nephrologists will make this decision during your assessment in the Clinic.

❑ Next Appointments at the Nephrology Clinic

It is important that you continue to visit your kidney transplant specialist as directed – they are the experts at monitoring your kidney function and adjusting your medications as needed.

You are required to have regular blood work and clinic visits – prescriptions can be completed based on the results of your tests.



Before you leave the Nephrology Clinic, make sure that you check out with the ClinicClerk.

Schedule your next appointment before you leave the Nephrology Clinic.

The Role of your Family Doctor

The Kidney Transplant Team provides care directly related to your transplant. This includes providing you with prescriptions for anti-rejection drugs and transplant related medications. Remember that prescriptions cannot be given if the Kidney Transplant Team has not seen recent blood work.

Your family doctor continues to be your primary care provider. Your family doctor will manage your overall health care including vaccinations. If you do not have a family doctor, it is important that you find one.

Visit your family doctor within the first week after returning home, and each week for the first two months. After two months, you can see your physician every two weeks, and then less often as your physician decides. Your family doctor will receive information about your health and guidelines for your long-term care. You will be given information to take to your pharmacist on the medications that you are presently taking.

❑ Ontario Telemedicine Network (OTN)



Telemedicine (called OTN) uses video computer technology to move your appointment with your doctor from in the hospital to your home. You stay at home, your doctor stays in the hospital and you connect through the internet.

OTN can be arranged for recipients who live quite a distance from the hospital. OTN is not an option if you need any tests to be done during your visit (including listening to your lungs, checking your blood pressure or doing a physical exam).

To have an OTN appointment, you will need:

- 1) One of the following:
 - Desktop computer with webcam/microphone/speaker
 - Laptop with webcam/microphone/speaker
 - Android Tablet or iPad
 - Smartphone (excluding Blackberry)
- 2) Internet access
- 3) Email address

Check with your doctor to see if OTN is an option for you – your transplant team will be happy to facilitate.

Our Transplant Out-patient Clerk will set up OTN for you. You will receive an email appointment from OTN when it is scheduled as well as a reminder email 24 hours before your appointment.

Life after Transplant



Most transplant recipients can look forward to resuming a normal lifestyle. We encourage recipients to follow good health habits.

□ Diet and Nutrition

Good nutrition is an important part of your recovery following kidney transplantation. The purpose of your post-transplant diet is to help prevent high blood pressure, high blood sugar, excess weight gain and promote good overall health and wellness.

• **What is Good Nutrition?**

Good nutrition means eating a variety of foods that give you all the nutrients you need to maintain your health and feel strong. Nutrients include proteins, carbohydrates, fats, vitamins, minerals and trace elements. Your meals should include whole, unprocessed, nutrient rich foods.

If you no longer require a low potassium diet, examples of whole, unprocessed, nutrient rich foods are:

- Red meat (beef, pork)
- Poultry (chicken, turkey)
- Fish
- Eggs
- Leafy vegetables (kale, spinach)
- Nuts
- Legumes (lentils, kidney beans, chickpeas)
- Dairy (milk, yogurt, cottage cheese, hard cheese)
- Whole grains
- Starchy vegetables (potatoes, beets, turnip)

• **Food safety** is also important following organ transplant and includes:

- ✓ Hand washing before and after handling food
- ✓ Cooking foods to the correct internal temperature before eating
- ✓ Ensuring foods are stored correctly and not used beyond expiration date
- ✓ Using care to avoid potentially high-risk foods (raw and undercooked meats, eggs, poultry, and seafood, or unpasteurized dairy) because they may contain bacteria that can cause infection

• **Will I Need to Change My Diet?**

If necessary, your healthcare team can help you understand which foods you should avoid or limit – and why. Dietary changes that may be required are:

- ✓ Avoiding certain fruits (grapefruit and pomegranate) as they can affect the level of medications in your blood (see Medication Tips on page 13)
- ✓ Eating a low salt diet to reduce swelling and limit fluid retention
- ✓ Eating a heart healthy diet to manage blood cholesterol

- ✓ Eating more protein throughout the day to help with energy and muscle development
- ✓ Eating more calcium to maintain good bone health
- ✓ Limiting sugary and over processed foods to help control blood sugar levels

- **If you were on dialysis you may have been avoiding high potassium and phosphorus foods. Is it necessary to continue to restrict these?**

- ✓ **Potassium:** Most often, your new kidney will be able to get rid of extra potassium in your diet. However, you may still be on medication that cause a higher level of potassium in the blood. If this happens you will be told to limit the amount of potassium in your diet. Please ask to speak with the Registered Dietitian for instruction on how to do this.
- ✓ **Phosphorus:** Generally, you will no longer need to follow a low phosphorus diet. In fact, you may need to include high phosphorus foods in your diet to make sure your blood levels do not become low.

- **Sugar Recommendations**

Health Canada recommends a healthy eating pattern where most sugars come from fruit, vegetables and unsweetened dairy products such as plain milk or yogurt. Other sources of sugars can increase calories without benefiting our health.

Avoid empty calories from simple sugars such as regular pop, candy and added sugars.

Eating more calories than you are burning can lead to problems with obesity and increases your risk of chronic diseases such as:

- ✓ Type 2 diabetes
- ✓ Some forms of cancer
- ✓ Cardiovascular disease

- **The Role of your Dietitian**

The dietitian at your transplant center can guide you on which diet is right for you. If you have questions or need more information about healthy eating after your kidney transplant, you can ask to speak with the dietitian. If your appetite is poor or you have difficulty eating after surgery please request a referral to see the dietitian who works within the kidney transplant program.

❑ Exercise and Activity

Your tolerance for activity will initially depend on how sick you were before surgery. Regular sleep and exercise will help you on the road to recovery – this is very important for your mental health and physical well-being.

During the first two months after your transplant, you should not lift anything heavier than 10 lbs. Lifting, pushing, or pulling too much weight too soon could possibly cause a hernia to develop.

A kidney transplant recipient should avoid abdominal exercises (sit-ups, crunches, etc.) for 8 weeks following surgery in order to ensure proper healing of the incision. After 8 weeks, it is important to gradually begin abdominal exercises since weak abdominals increase your risk of back pain and injury.

Exercise has many benefits:



- ✓ improved blood pressure control
- ✓ improved muscle strength
- ✓ lowered level of blood fats
- ✓ better control of body weight
- ✓ stronger bones
- ✓ better sleep with improved energy level

To benefit from an exercise program, you should try to exercise at least three days a week. It's best to exercise on non-consecutive days, and always wait one hour after eating. Find an activity you enjoy and have fun! Please speak to your transplant team about the potential risks of participating in contact sports, such as hockey, karate, or football.

❑ Gardening

Wear gloves when doing dirty work like gardening to prevent puncture wounds and because of bacteria in the dirt.

❑ Pets

While household pets increase the risk of infection, they also increase quality of life. Mainly, avoid contact with excrement. If you can't get someone to clean a cage or litter tray for you, always use gloves and mask.



❑ Returning to Work



Most recipients are off work for about three months after transplant surgery. The time that you need before returning to work will depend on how fast you recover and the type of work that you do. These and other factors can influence your decision when to return to work. Depending on your job, you may be able to return to work part days to start.

You should discuss this issue with your doctor and employer before deciding to drive.

❑ Driving

Most people can usually resume driving two months after transplant, but this is a case-by-case decision. You should be off strong pain medications if you are operating a vehicle. Check with your doctor before resuming driving.



Remember, you are still required to wear a seatbelt. If the belt bothers your incision, place a towel or blanket between you and the seatbelt.

❑ Travelling



You are able to travel as often as you wish after the transplant. It is not recommended that you leave the country for the first 6 months.

Always discuss your travel plans with your physician. Your doctor may be able to give you names of physicians in the area where you are travelling. Some countries will require that you get vaccinated. Please discuss this issue with the transplant team prior to receiving any vaccines. You must not take vaccines made from live viruses.

It is important that you obtain medical insurance, bring your own supply of medications, and store the medications in your carry-on luggage. Always take extra medications with you in case of emergency or delay. You should be prepared to return home if you become ill during your vacation.

What about time differences? If you are away a short time, take your medications at the same time as you would at home. If you are away a longer time, then you may wish to adjust your dosing to the time of the new place.

❑ Sexual Activity

There are no restrictions on sexual activity after kidney transplant. You may resume activity whenever you and your partner feel comfortable.

For females of childbearing years it is important to use birth control. The use of birth control pills is not recommended. We recommend using the double barrier method for birth control, that is, condoms and contraceptive foam or diaphragm and contraceptive foam. Previously non-menstruating females may resume menstruation and become pregnant. Any member of the transplant team is available to discuss family planning and birth control with you.

❑ Pregnancy

For females of childbearing years, starting or enlarging their family may be one of the goals of retuning to a 'normal' life. Successful pregnancies have been reported within our program and worldwide. However, there can be an increased risk to both the mother and the child. Although many women have given birth to healthy babies after a kidney transplant, it is recommended that women do not become pregnant for the first year following transplant.

Your Transplant Physician may wish to change your anti-rejection medications prior to conception and/or during pregnancy.

During your pregnancy, you will need to be monitored closely for:

- rejection
- fetal development during pregnancy
- maternal complications such as gestational diabetes, hypertension, pre-eclampsia, and infection

Consultation to the FRAME (Fetal Risk Assessment from Maternal Exposure) Clinic for all female patients considering pregnancy and a high-risk OB/GYN is recommended. After kidney transplant, the team will discuss with you're the risks of breast feeding.

Check with your transplant physician about pre-conception and pregnancy.

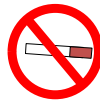
❑ Alcohol

Drinking alcohol can affect many parts of your body, including your kidneys. The occasional drink does not usually have serious side effects. However, drinking too much can harm your health including worsening kidney disease. A good guideline is to have no more than one drink a day. Experts refer to one drink as either one 12-ounce bottle of beer, one glass of wine (5 ounces), or one shot (1.5 ounces) of 'hard liquor'.

Some people should not drink at all. Ask your healthcare provider if it is safe for you to drink – some medical conditions and medications may be affected by drinking alcohol.

❑ Smoking

Kidney transplant recipients are advised **NOT** to smoke cigarettes.



❑ Cannabis

There is not a lot of research looking at the effects of marijuana in transplant patients and therefore we neither recommend nor prohibit the use of marijuana for transplant patients. Please advise the Transplant Team of any marijuana use as it may impact your health.

If you choose to use any form of marijuana, it is important for you to know:

1. Cannabis (both THC and CBD oil) may affect the levels of many drugs in your blood. If you use marijuana regularly, you will need to test your transplant drug levels more often. This is to make sure that your drug levels are at the best possible level to prevent rejection. Irregular and/or infrequent marijuana use can cause variation in your transplant drug levels and make it difficult for the transplant team to adjust your drugs accurately.
2. Due to the risk for fungal infection when inhaled, transplant recipients should **NOT INHALE** any marijuana products.



If you choose to use marijuana, the Transplant Team strongly advises transplant recipients to obtain their cannabis products from legitimate and consistent sources only and never use 'street' products. This is because of the risk of contamination of the marijuana and using a consistent reputable product helps to ensure you receive a consistent dose which makes it easier to monitor your anti-rejection drug levels.

□ Emotional Support

Kidney transplant surgery can be a very emotional experience. You may have many different feelings. On one hand, you may be happy that you are now feeling better and have an opportunity for a second chance at a healthier life. On the other hand, you may also have feelings of sadness and grief for the donor and their family. You are not alone. Many transplant patients feel this way. It may take some time to work your way through these complex feelings. Your transplant team is available to help you through this time. Some useful tips for dealing with these feelings are:

- ✓ **Talk About Your Feelings**
Opening up and being honest about what you are feeling can be very helpful. This can be to your family, support person, friends or the Transplant Team. The Social Worker with the Transplant Team can be an excellent resource if you are struggling to identify and cope with what you are feeling.
- ✓ **Speaking with other transplant recipients**
You will have many opportunities during your transplant journey to meet with other recipients (e.g. physio class). This is a great chance to talk about how you feel and how they managed.
- ✓ **Writing the Donor Family**
If you are interested, recipients are able to write to the donor family. It is recommended that you wait at least three months before doing this. The decision to write to a donor family is yours to make. There are no expectations from the Transplant Team or donor family. A brochure has been included in this binder outlining the process should you wish to write a letter.
- ✓ **Getting Involved**
Sharing your story and becoming an advocate for organ and tissue donation has helped many feel as though they are giving back. Opportunities are available for transplant recipients to help increase organ donation awareness. If you are interested in getting involved, please speak to the Transplant Team.

Returning to your previously healthy self after transplantation may be an adjustment for both you and your family/support team. Transplantation cannot be done alone; you need the ongoing support of your family and friends to be successful.

It is also important to remember your family/support team is also going through a change. Their role in your life is also undergoing change as you recover from surgery and your overall health improves. It is not uncommon for your family/support team to need support of their own. Patience is required on both sides as you find your 'new normal'.

Do not hesitate to contact members of your Transplant Team or your Local Health Care Team, (e.g. family doctor) if you or your family/support team need additional assistance. Resources are available in your local area to help you and your family/support team cope with the changes that transplantation brings.



Education Check Point

Medications & Vaccinations

- ☐ I have watched the medication videos.
- ☐ I have my SMP (Self-Medication Program) sheets.
- ☐ I can recognize my pills and understand my doses.
- ☐ I have my specific drug information sheets:
 - ☐ Advagraf or Envarsus/ Tacrolimus
 - ☐ Myfortic/ Mycophenolate
 - ☐ Acyclovir or Valganciclovir
 - ☐ Sulfatrim
 - ☐ Prednisone
- ☐ I understand vaccinations and know which ones I've had and which ones I need.

Potential Complications

- ☐ I have a thermometer or will get one for use at home.
- ☐ I know how to identify signs of infection or rejection.
- ☐ I have a Medic Alert Form or know how to get one.
- ☐ I know which vaccinations are safe and which vaccinations I should have.
- ☐ I have any specific information sheets that apply to me:
 - ☐ Hepatitis C FAQ

Transplant Follow up

- ☐ I have my Nephrology Clinic Appointment.
- ☐ I have my Surgery Clinic Appointment.
- ☐ I have the OTN Patient Information sheet.

Life After Transplant

- ☐ Information sheets I might be interested in:
 - ☐ Cannabis FAQ
 - ☐ Writing to Donor Families

E Store for Organ Transplant Awareness



 CART  0 Items  CHECK OUT

SEARCH

home

clothing

accessories

clearance

eStore for Organ Transplant Awareness



New shipping rate of only \$10.00!

For more than 20 years, the Transplant Awareness Committee from London Health Sciences Centre in London, Canada has worked to increase awareness about the need for organ donation and the success of transplantation.

As well as taking part in various campaigns and community events, our small group has developed some merchandise to help spread the word! We want everyone to consider organ and tissue donation, and talk with their family about their wishes.

Transplants save lives.

Your support can make a difference! This e-store is a not-for-profit initiative with all proceeds from sales going towards further promotion of organ donation and transplantation.

For further information about our transplant program, please visit www.lhsc.on.ca/transplant

Other



Supporting our Multi-Organ Transplant Program

The Multi-Organ Transplant Program at London Health Sciences Centre is one of the leading transplant programs in Canada, performing nearly 200 transplants annually. Almost 6,000 Canadians have received transplants, including kidney, liver, heart, kidney-pancreas, pancreas, and multi-organ transplantation.

London Health Sciences Foundation provides patients and their families with an opportunity to show gratitude to those who played a special role in the care they received.

Whether you choose to salute a special doctor, nurse or allied health member, or our transplant program in general, your donation is a meaningful way to say "thank you". Your gift will help create life-changing moments for our patients by funding the transplant program's highest priority needs in patient care, research, and education.

Yes! I'm a grateful patient and would like to support:

- ☐ Multi-Organ Transplant Program Fund (#77-680-01) for highest priority needs in patient care, education, equipment
- ☐ Multi-Organ Transplant Program Research Fund (#78-680-01) for innovative clinical and laboratory research
- ☐ Transplant Patient Assistance Fund (#14-690-05) for much-needed financial assistance during the transplant process
- ☐ Transplant Staff Education Fund (#12-680-21) for professional development and mentorship

I'd like to say thank you to:

I'd like to make a single gift of: ☐ \$50 ☐ \$100 ☐ \$500 ☐ \$1,000 ☐ Other: \$ _____
I'd like to make a monthly gift of: ☐ \$10 ☐ \$15 ☐ \$20 ☐ \$25 ☐ Other: \$ _____

Payment Options (please choose one payment option)

- ☐ Cheque (Payable to London Health Sciences Foundation)
- ☐ Credit Card: ☐ Visa ☐ MasterCard ☐ Amex

Card Number _____ Expiry Date _____ Security Code _____

☐ Automatic Bank Withdrawal (Canadian financial institutions only). Please include a blank cheque marked "VOID".
I authorize installments of \$ _____ ☐ monthly ☐ quarterly ☐ annually - Commencing (M/Y) ____ / ____

Contact Information:

Name: _____
Address: _____
City: _____ Province: _____ Postal Code: _____
Telephone: _____ Email: _____
Signature: _____ Date: _____

- ☐ I'd like to arrange an interview to share my story. Please contact me at the above information.

Please mail your completed form with your gift to:

London Health Sciences Foundation
747 Base Line Road East
London, ON N6C 2R6

dl**gc



Nephrology Outpatient Clinic 519-663-3346

- **If you are experiencing a medical emergency, go to your local ER. Call 911 if necessary.**

- **During Regular Hours (8:00AM – 4:00PM), call the Nephrology Clinic with any questions**
- **After Hours (before 11:00PM) and on Weekends and Stat Holidays (before 11:00PM), if you have an urgent issue, you may page the Nephrologist on Call through University Hospital switchboard.**
- **After 11:00PM, do NOT call the nephrologist – if you have an urgent**

To have someone paged, push 0 and ask the switchboard operator to page the person you need.

Pharmacist transplantmeds@lhsc.on.ca

Social Worker 519-685-8500 ext 32411

Appendix

Figure 1: Healthy Skin After Transplant

London Health Sciences Centre
Multi-Organ Transplant Program

Healthy Skin After Transplant

Protect your skin. Protect your health.
Enjoy your new life.

A healthier tomorrow is brighter together.

Simple steps today for a healthy tomorrow.

WHY YOUR SKIN NEEDS EXTRA CARE

The medications that keep your new organ healthy lower your immune system. This means your skin is more sensitive to ultraviolet (UV) rays and you have a higher risk of skin cancer.

Organ Transplant: Kidney, Liver, Heart, Lung

Lower immune defenses = Higher risk of skin cancer

YOUR RISK IS HIGHER IF YOU:

- Have fair skin, light eyes, or red or blonde hair or you burn easily.
- Are 50+ or older at the time of your transplant, or you are male.
- Received a heart or lung transplant.
- Have had a previous skin cancer or many "sun spots" (actinic keratosis).
- Have spent a lot of time outdoors or had blistering sunburns in the past, or used tanning beds.

If you have brown or black skin:
Your risk is lower, but it's not zero. Skin cancers can occur and are often found later. Be sure to check areas that get less sun (palms, soles, under nails, mouth and genital area).

COVER UP & ENJOY THE OUTDOORS

Sun protection is your last layer of defense.

- Seek shade 11 a.m. – 3 p.m. when UV rays are strongest.
- Wear a wide-brimmed hat (at least 7.5 cm).
- Wear sunglasses that block 100% UVA & UVB.
- Wear long sleeves and long pants (UPF 30-50+).
- Use a broad-spectrum, water-resistant sunscreen (SPF 30-50+). Apply generously and reapply every 2 hours.

THE TWO-FINGER RULE

Use about 2 finger-widths (covering the full length of the index and middle fingers) for face and neck (approximately two finger-length strips).

Never use tanning beds or sun lamps.
A tan is a sign of skin damage.

DO A MONTHLY SKIN CHECK

You will notice changes long before your next visit. Pick the same day each month.

- Use a full-length mirror and a hand mirror.
- Check your skin from head to toe.
- Ask someone to check hard-to-see areas (scalp, back).
- Take photos to compare next month.
- Look for anything new, changing or not healing.

DON'T FORGET: Lips & mouth, Eyelids, Palms, Soles, Genital area

WHAT TO LOOK FOR

Call your transplant team or family doctor if you notice:

- A new lump or bump that grows over a few weeks.
- A rough, scaly or tender patch that keeps coming back.
- A sore that has not healed in 4 weeks, or that bleeds or crabs over again and again.
- Anything growing (including nail) OR SORE SHOULD BE CHECKED RIGHT AWAY.
- A mole or spot that changes in size, shape or colour, or that itches or bleeds.
- A new dark streak under a fingernail or toenail.

Call your transplant team.

USE TRUSTED RESOURCES

Learn how to do a self-skin exam.

Canadian Dermatology Association: Check Your Skin
American Academy of Dermatology: Skin Self-Examination

WHEN SHOULD SKIN CHECKS START?

Most transplant recipients should have a full skin exam by a trained health-care provider:

- Ideally before your transplant, or as soon as possible after it.
- Then at least once a year (timing may vary based on your risk).

Your transplant team will advise what is right for you.

You're more than a transplant. You're a brighter tomorrow.

HEALTHY SKIN HELPS YOU ENJOY YOUR NEW LIFE

PROTECT TODAY **DETECT EARLY** **STAY HEALTHY**

SCIENTIFIC REFERENCES

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