SMH Transplant Program Participates In World Kidney Day
Jennifer Meriam Jayoma-Austria, RN, C.Neph.C

Chronic kidney disease (CKD), leading to kidney failure, is increasing around the world. This has been attributed primarily to aging and increasing numbers of people with diabetes and hypertension. Much of CKD medicine applies to kidney transplant recipients as well. Early detection and prevention of CKD will help population health and conserve costs to the health care system. World Kidney Day, celebrated in March each year, highlights this growing epidemic by promoting screening, prevention and early detection of kidney disease. This is also a good means to increase awareness of the important functions of the kidney to the body and how we should take care of them. This year on March 18, St. Michael’s Renal Program joined the rest of the world in promoting kidney awareness. The event was made possible through the support of the three managers, Trixie Williams, Colleen Johns and Andrzej Gryka, and two pharmaceutical companies, Roche and Novartis.

The Kidney Day Awareness event at SMH was held in the Victoria lobby. The purpose of conducting the event in that busy location was to be able to promote it to as many people as possible: not just hospital staff, but also patients, their families and visitors to the hospital coming from all walks of life. It was a half day fun-filled event. Staff from the dialysis unit and transplant unit were present to field questions from other staff and the public about different kidney diseases. The staff also provided information about the different functions of the kidney and how to keep it healthy through a jeopardy game, which proved to be a popular and enjoyable way of teaching and learning. The Risk Modification Center of the hospital conducted a body weight analysis for those interested in discovering their body muscle and fat content. The entire event was a grand success and we now plan to do this annually.
From the Editor’s Desk...

Chronic kidney disease, or CKD for short, is present forever once it occurs. Although transplantation replaces the greatest amount of kidney function, often to the extent of 50-60% of normal, transplanted patients still have CKD and are prone to many of the problems faced by all CKD patients. In previous issues of Transplant Digest we have strived to explain in-depth some of these problems, to help our patients become more proactive in their health maintenance. We have also taken note of the most common questions that patients ask in the clinic, and realized that many do not relate to CKD at all. This edition is dedicated to those issues.

Our pre-transplant feature highlights the most common questions asked about issues such as donor eligibility, drug coverage, and what to do when that long-awaited call to come to the hospital is finally received. The post-transplant section discusses in-depth the role of the transplant clinic versus that of the family doctor, which as you might imagine can be contentious at times. Old age does not contraindicate transplantation. In fact we help facilitate transplants for the elderly on a regular basis, as explained in a letter received from one of our patients. A highlight on the Transplant Companions Program is included for your information, to assist in your search for more detail on a variety of topics. We also have an article on herbal remedies from our transplant pharmacist, and on pregnancy written by Dr. Zaltzman. Your opinions on these and other issues are always welcome.

Dr. Ramesh Prasad,
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Disclaimer Note:
Views presented in this newsletter are those of the writers and do not necessarily reflect those of St. Michael’s Hospital or the University of Toronto. Subject matter should not be construed as specific medical advice and may not be relevant to individual patient circumstances. For all questions related to your own health please contact your health care provider.
1. If I receive a call for a transplant, does this mean I will get the kidney?

Not necessarily. Sometimes the attending doctor may decide to call 2 or more possible recipients and you may be called in as a back-up, in case the other recipient(s) are turned down or may be deemed unsuitable for kidney transplant at that time. Sometimes, the kidney itself turns out to be unsuitable for transplanting in to anyone.

2. If I receive a call for transplant, how fast do I have to be at the hospital?

Make sure that you return the call promptly and inform the doctor who called you that you are coming. Go to St. Michael’s Hospital, 8th floor Cardinal Carter Wing as soon as you can. If you do not reply to your call within a set time, usually an hour, you may lose your chance to get the kidney since it may then be given to someone else. Remember, the longer it takes to transplant the kidney, the less likely it is to do well afterwards. If you are on home dialysis, let the transplant team know and then disconnect yourself safely with help from your dialysis team if needed.

3. What do I have to bring with me to the hospital if I am being called for a kidney transplant?

Please bring all your medicines or list of medicines that you are taking. Know all your drug allergies and tell these to the team at the hospital. You may also bring with you slippers, comfortable sleep wear, personal toiletries (e.g. toothbrush, toothpaste, comb etc.). Please leave all valuable material at home. As before any major surgery, avoid wearing make-up.

4. Is it important that my tissue typing (genetic marker) be exactly the same as my potential deceased donor?

It would be great if you have the same tissue type as the donor. However, in kidney transplantation this is very rare and is in fact not necessary. As long as your blood type is compatible with the donor and you are medically cleared at the time you are called, you are eligible to receive the kidney.

5. Are there different kinds of kidney transplants?

There are two kinds of kidney transplants:

A. Live Donor Kidney Transplant

For this type of transplant, the kidney comes from a live person who voluntarily agreed to donate one of their kidneys to you. Right now there are different initiatives/ways for living donor kidney transplantation. For more information, you may contact the live donor coordinator at 416-867-3676.

B. Deceased Donor Kidney Transplant (formerly known as Cadaveric Transplant)

For this type of kidney transplant, the donor is someone who just passed away. The person who passed away or the family of the person must give consent before the kidney or any other organ is used for transplant. The kidneys from this donor are given to those on the kidney transplant waiting list.

6. Is there an age limit for kidney transplant recipients?

Age is not necessarily an exclusion factor to getting a kidney. It is very important that the recipient is medically and surgically cleared.
7. I have diabetes. Will this prevent me from getting a transplant?

Diabetes will not prevent you from getting a transplant. The risks for complications may be increased for those with diabetes. SMH has diabetes specialists who can assess and monitor your diabetes management after your kidney transplant as needed. If you have type 1 diabetes, talk to your doctor about getting a combined kidney pancreas transplant.

8. If I get a kidney transplant, will it cure my diabetes?

Unfortunately, kidney transplant will not cure your diabetes. You may find that your diabetes may be more or less stable than before. Sometimes people in fact develop diabetes after a transplant. This is usually an acceleration of pre-diabetes to diabetes.

9. Is there accommodation provided by St. Michael’s Hospital (SMH) for my family or relatives, while I am recovering from my transplant surgery?

SMH does not provide free accommodation to your family or relatives. However, there are local hotels that provide discounts for SMH patients and their families. Please contact the social worker in the transplant program for details.

10. After my discharge from the hospital, is transportation provided by the transplant clinic for my appointments?

Unfortunately, SMH transplant program will not provide free transportation. It is important that you arrange appropriate transportation prior to discharge from the hospital. You may need to discuss this with your family and friends who may be able to assist. You may also need to explore community resources that may be available to you at a fee. You may need to talk to a social worker about this prior to discharge.

11. I understand that medications for transplant are expensive, what do I do if I don’t have a private drug plan?

You have to apply for the Trillium Drug Program. This is a deductible based subsidized program provided by the Ontario government. For more information on how to apply, you may need to approach your social worker or you can go to this website: [http://www.health.gov.on.ca/english/public/pub/drugs/trillium.html](http://www.health.gov.on.ca/english/public/pub/drugs/trillium.html)

12. I heard that there is a new Transplant Patient Expense Reimbursement program launched in Ontario. Can I apply for this?

Unfortunately, this program is currently meant only for heart, heart-lung, and lung transplant patients. If you wish to have more information, go on the internet to [www.giftoflife.on.ca](http://www.giftoflife.on.ca), or contact the TPER Administrator (416-619-2342 or 1-888-977-3563), or speak to your Transplant Coordinator.
PREGNANCY AFTER KIDNEY TRANSPLANTATION
Dr. Jeffrey S. Zaltzman

There are well established benefits of kidney transplant compared with maintenance dialysis therapy. In broad terms these include: improvement in quality of life, longer life-span and less cost to the health care system. One of the specific benefits following transplantation is improved female fertility with a much greater likelihood of having a successful pregnancy with superior maternal and infant outcomes compared with gestations for women on dialysis.

There are a number of registries that report on pregnancy outcomes following transplantation. By 2001 Davison and Baylis accumulated data on 14,000 pregnancies in women following solid organ transplantation, with the majority occurring in women with kidney transplants(1). However this represents only a fraction of the total number, as there is under-reporting since most transplant centers do not routinely submit data on such patients. None the less, registry data is important as it does provide information on maternal and infant outcomes, and allows for comparisons with the non-transplant population.

Risks of pregnancy to the fetus
The risks to the fetus are determined by the following factors: maternal health, length of gestation, transmission of infections and exposure to medications including immunosuppressive agents.

The important factors relate to the general medical condition of the mother and the kidney transplant-related issues. There are some women who despite having a successful kidney transplant, may have the medical problems that increase the risks both to the mother and the fetus. The timing of pregnancy is very important. In general it is best to avoid pregnancy within the first 12 months post-transplant. Rejection of the kidney and infections are most commonly seen within the first year post-transplant. A common infection during this time is cytomegalovirus (CMV) which can be a problem for the patient but devastating to the fetus.

In addition in the early post-transplant period the doses of immunosuppressive therapies are at their highest levels and some of these medications are harmful to the fetus. Although no medication is absolutely safe for the fetus some of the immunosuppressive agents such as cyclosporine (Neoral), tacrolimus (Prograf), and prednisone have been used successfully, whereas other anti-rejection medications such as mycophenolate mofetil (Cellcept, Myfortic), azathioprine (Imuran) and sirolimus (Rapamune) are known to cause birth defects and should be avoided or discontinued upon consultation with the transplant team. A number of other medications including some classes of anti-hypertensive medications may need to be switched.

Registry data suggests that the incidence of major malformations in babies born to mothers with organ transplants who adhere to the correctly prescribed medications, is no different than observed in the general non-transplant populations.

For a number of reasons, babies born to women with transplants are often born early(2) or with lower birth weight(3). This means that these pregnancies should be followed by obstetricians with expertise in this area, and close follow-up and monitoring during gestation is mandatory.
In addition deliveries should be occurring in facilities with capacity for caring for newborns who may require more complex care.

**Risks of pregnancy to the mother**

The issue of waiting at least 12 months following transplant has been discussed above. Health considerations of each patient must be determined and individual consultation with the transplant physician should be undertaken in advance of the planned pregnancy. In general the best maternal outcomes are seen in patients with well-controlled blood pressure, good kidney transplant function and little to no protein excretion in the urine. Since some transplant medications may need to be discontinued, there needs to be close follow-up during the pregnancy for rejection. In addition transplant recipients are at increased risks for hypertension during the pregnancy and superimposed toxemia (preeclampsia). Other problems that need to be watched for include: gestational diabetes, urinary tract infections and anemia. Lastly, an important question that arises is whether pregnancy affects long-term kidney transplant outcomes. To date, registry confirms that in otherwise healthy kidney transplant recipients, pregnancy does not negatively impact on graft survival.

**Summary**

Pregnancy following renal transplantation can be realized safely and successfully. Since fertility can be restored almost immediately post-transplant, contraception should be used very early on, as pregnancy is not recommended within the first year.

Patients interested in becoming pregnant should meet in advance with their transplant physician to discuss individual risks and planning, including cessation or switching of some medications. Close follow-up in the transplant clinic including more frequent blood testing will be required. Referral to an obstetrician comfortable in dealing with higher-risk pregnancies is extremely important.

**References**


Post-Transplant Chat
Jennie Huckle, RN, Fernanda Shamy, RN, Thelma Carino, RN

Understanding the Role of the Doctor and Transplant Clinic

1. Who is my doctor after the transplant?

The transplant team will take care of your transplant-related issues only. All other issues, including primary
care and prevention, should be undertaken by your family doctor (FD). All patients should have an FD and
you must give their contact information to the Transplant Clinic at your first visit. You should also update
this information with us whenever there is a change. Thus, you will have at minimum two doctors at all
times, the nephrologist and the FD. They are partners in your care. You do not need to see your dialysis
doctor unless you wish to.

2. Why do I need more than one doctor to take care of me?

There are some issues that can be managed only by the transplant doctor, for example, your immunosuppression.
There are others that can be managed only by a family physician e.g. Pap smears. Each physician can provide care
only in those areas that he or she knows best.

3. When should I see my FD?

You should see your FD as soon as possible after your transplant. This relationship must be maintained. Even if
you are generally healthy, you must go for regularly scheduled physical examinations. You require ongoing
monitoring for skin cancer, a Pap smear and PSA, bone density test, cholesterol, mammogram, colonoscopy, etc…
These should be arranged by your FD.

4. When should I see the transplant doctor?

You must come to the Transplant Clinic whenever you have been given an appointment, and whenever you are
called. A call to come is made because the transplant doctor or nurse is concerned about your health. Missed
appointments can seriously compromise your care and even put the transplant or your life in danger. You should be
willing to come to the Transplant Clinic very often early after the transplant, but always call ahead when you do so.

5. Why can’t I come to the Transplant Clinic whenever I want?

Please note that the Transplant Clinic is not a walk-in clinic. The transplant doctors have many responsibilities and
will often not be there. There may also be no nurse available to see you since the clinic space is shared with many
other services. All your efforts in coming to the clinic will be wasted.
Most medications can be prescribed by FD, the important exception being transplant related immunosuppressive drugs. Please pick up a list of common over-the-counter medications that you can take when you come to the clinic, which you can also give to your FD. Some FD may be concerned about prescribing certain medications. If that is the case, please ask them to call us.

Refills are typically given by the doctor who first prescribed the medication. Some medications require a lot of monitoring e.g. coumadin and thyroid hormone, which the Transplant Clinic cannot provide. These must be given by the FD. Apart from immunosuppressive drugs, it may be more convenient for you to get all your refills through your FD. Avoid running out of pills by making sure you get prescriptions written at the time of your clinic visit.

Your FD coordinates your overall care, including referrals to specialists. The transplant doctor is but one doctor who has been consulted to help provide care for you. He or she is not your primary doctor. Your transplant doctor may help by suggesting certain other specialists to see for other issues, but that referral should come from your FD, even if the other specialist is at St. Michael’s Hospital.

This is a serious problem that you must do your best to address. This is your responsibility. Check the College of Physicians and Surgeons of Ontario website www.cpso.on.ca for available FDs. Also speak with our social worker for suggestions. Please be honest with us about whether you have a FD, since we simply cannot do everything that a FD can to preserve your health, and you may end up being disserviced for a variety of reasons.

Please tell your lab to send all your results to both the transplant doctor and FD, so that both doctors and their staff may monitor these. If you do your bloodwork here, registration at the desk allows us to check those results quickly, often on the same day.

If you strongly feel that you have a transplant related issue, call the Transplant Clinic to make an appointment. You must understand however, that you cannot be seen immediately, and this can delay your treatment. If you need immediate medical attention, call 9-1-1 or go to your nearest emergency room. For non-urgent issues, call your FD or go to a walk-in clinic.
Herbal medications are drugs derived from plants that are used in the treatment of various illnesses. These conditions range from depression to diabetes and can have many different effects on the body. Today, many Canadians use herbal remedies in several forms, such as vitamin and mineral supplements as well as traditional Chinese and homeopathic formulations.

However, natural health products are not regulated by Health Canada as prescription drugs are, which makes them more difficult to monitor for patient safety. Therefore, there is always the possibility that a plant species has been misidentified or that the amount of an ingredient may vary from that stated on the label. In addition to these concerns, herbal medications may have side effects or drug interactions with prescription/over-the-counter medications that can lead to harmful effects.

In 2004, Health Canada arranged new regulations to ensure that herbal products are well prepared and safer to use. Authorized health products have either an eight digit Natural Product Number (NPN) or a Homeopathic Medicine Number (DIN-HM). This number allows you to know that the product has passed a review of its formulation, labeling, and instructions for use. However, this process will take many years to finish and products that are not closely regulated are still accessible through pharmacies or the internet.

You can reduce your risks by making sure you know the answers to the following questions before using any herbal product:

- What are the benefits that I want from this product?
- Are there better alternatives?
- What is the evidence available that supports this product?
- Can this herbal medication interact with my other medications?

Here are some examples of common drug interactions you should watch out for:

**St. John’s Wort (also known as Hypericum, Rosin Rose, Tipton Weed)**

This herbal medication is commonly used for anxiety, depression and migraine headaches. However, it interacts with many medications. For example, immunosuppressive agents such as Cyclosporin (Neoral®) and Tacrolimus (Prograf®), birth control pills, blood thinners like Warfarin (Coumadin®), as well as seizure and thyroid medications. St. Johns Wort can decrease the effects of these medications, resulting in serious adverse events such as acute rejection, blood clots, and seizures.

**Red Yeast Rice (also known as Cholestin, Monascus purpureus, Xue Zhi Kang, Zhi Tai)**

This herbal remedy is commonly used to reduce cholesterol levels. It contains the same ingredient as Lovastatin, one of the “statin” drugs commonly used to control cholesterol. Therefore, it can cause similar side effects, such as muscle pain and increased liver enzymes. When taken with drugs such as Cyclosporine or foods such as grape fruit juice, severe muscle pain and liver damage can occur.

**Garlic (also known as Allii Sativi Bulbus, Lasuna, Nectar of the Gods, Stinking Rose)**

Garlic is used mainly to reduce cholesterol levels. Its main serious adverse effect is increased risk of bleeding, and therefore it should not be used when taking blood thinners such as Warfarin (Coumadin®), Aspirin, or Clopidogrel (Plavix®).

**REMEMBER: Always check with your doctor or pharmacist before taking any herbal medication to reduce your risk of adverse effects. Just because it’s natural, doesn’t mean it’s safe!**
Have you heard about The Transplant Companions® program?

Launched in 2003, the Transplant Companions® program is an education program designed specifically for pre-transplant kidney patients. Its objective is to provide patients with adequate information about what to expect from the transplantation process.

“Patients who attend the Transplant Companions workshop are better informed and are able to actively participate in their care, “said Galo Meliton, RN, C Neph (C), St. Michael’s Hospital, Toronto, and one of the health care facilitators who lead the program. “The information they learn empowers them and eliminates the fear of the unknown, which is often the most intimidating part of the transplantation process.”

The program includes an interactive workshop given by a health care professional and a patient who has undergone a kidney transplant. Patients are encouraged to ask questions and share their concerns, while a patient facilitator talks about their first-hand transplant experience.

Patients who go on to sign up to the Transplant Companions program are able to stay connected through regular newsletters, a website and questionnaires. For the first time this year, patients who cannot attend the hospital-based workshops for health reasons or because of the distance to the transplant centers will have the opportunity to participate virtually using the internet. This fall, a pilot workshop will be given on the web to evaluate if distance learning is an effective way to help patients benefit from the Transplant Companions information. If it is, patients may be able to have access to the information from their very own home.

Transplant Companions was developed with the collaboration of a national, multidisciplinary Steering Committee composed of pre- and post-transplant patients, a transplant surgeon, nurses, pharmacists, transplant coordinators, social workers and representatives from patient advocacy organizations. It is endorsed by the Kidney Foundation of Canada and the Canadian Transplant Association.

Transplant Companions is a free program and its workshops are currently delivered in 14 renal centers across Canada. Half of these centers have made the program’s workshops compulsory for their pre-transplant patients.

For more information about the program, please visit www.transplantcompanions.ca

Some important facts about The Transplant Companions® Program

• Over 2,500 pre-transplant patients have attended workshops
• There are more than 500 active program members
• Over 300 workshops have been held across Canada
• Approximately 100 healthcare professional facilitators
• Approximately 50 renal transplant patient facilitators
• More than 10 facilitator training workshops have been conducted
• 14 participating centres across Canada
SMH Participation for World Kidney Day

Poster display on how to take care of your kidneys from the SMH Renal Transplant Program.

The background is the kidney jeopardy game, an interactive way to share information about the kidneys. From R to L: Mustafa Incekol, Thelma Carino, RN, Jenny Huckle, RN.

Some staff from the Renal Program. L to R: Taras Boutchma (Dialysis Technology Department), Susie Par (Kidney Transplant Clinic), Jennifer Meriam Jayoma-Austria, RN and Julie Muravsky (Social Worker).

The group who conducted the body weight analysis. They are from SMH Risk Factor Modification Center spearheaded by Clarissa Sam (middle).

One of the dialysis machines used by SMH is shown together with two staff from the Dialysis Technology department. From L to R: Carlos Ospina and Mustafa Incekol. The technologists provided information on the function of the machine.

Thank you very much to the following who helped organize the event:

Thelma Carino
Sharon Lee
Jackie Chen
Carmen Morris and her student
Maureen Connelly
Julie Muravsky
Jenny Huckle
Carlos Ospina
Mustafa Incekol and Taras Boutchma
Fernanda Shamy
Mari Vella
Clarissa Sam and her team from Risk Modification Center
Letter to the Editor

Elderly transplant patients

My wife, Ingrid Tung, is a 78 year old lady and first time kidney transplant patient. She received her kidney transplant at St. Michael’s Hospital in 2008. She was so fortunate to have waited for only 5 ½ years to receive a deceased kidney compared to the average wait of 7 to 10 years. She stayed in the hospital for 2 weeks due to “delayed graft function” and other minor complications. She was discharged from the hospital after 2 weeks. She had been through different methods of kidney dialysis treatments to sustain her life for the past 5 ½ years prior to kidney transplant. It was so hectic, not only for my wife but also for the entire family. It was a long and hard journey for an elderly couple.

After the successful operation by Dr. Robert Stewart, the transplant specialist, Dr. Ramesh Prasad, spent a lot of time carefully monitoring and looking after my wife. He had such a positive attitude and always had a smile on his face. His presence often comforted us even when there were some complications during my wife’s recovery. Both Dr. Stewart and Dr. Prasad are true role models for all doctors. Their medical expertise and compassion for patients clearly reflect the high standard of doctors and medical team at St. Michael’s Hospital.

Six months of follow-up clinic after the transplant, my wife’s kidney is now functioning very well, despite her experience and encounter with “delayed graft function” for 3 weeks and a couple of infections during her recovery. She is not only getting better, but is steadily gaining weight. She is now able to do Tai-chi at home. The St. Michael’s Hospital follow-up clinic, under Dr. Jeff Zaltzman and Dr. Ramesh Prasad, is second to none. In addition to having experience and expertise in the field of transplant care, the staff there monitor and treat each individual patient with love and compassion.

The attending nurses, dieticians, pharmacists and the supporting staff each with expertise and knowledge in their own areas played a vital role in the total care of their patients. You have an excellent kidney transplant medical centre, not only for the equipment and facility, but also for your outstanding transplant staff and their teamwork. Their extraordinary medical skill and knowledge truly deserve our respect and admiration. We are so grateful to your hospital for providing my wife and me with the chance to live our lives again with joy and dignity.

Thomas Tung
ANNOUNCEMENT

Pre Transplant Information Sessions

The SMH transplant team will be hosting group information sessions to educate all patients referred to our program about the SMH kidney transplant process. This is an effort to serve our patients better.

Stay tuned for more details.

Coming Soon...

more information on...

Out of Country Living Donors

Living Donor Paired Exchange Program