Minimally Invasive Surgery (MIS) and Open Nephrectomy (Kidney Removal) (Simple, Partial, Total)

Patient Information Booklet

Please bring this book to your admission to the Hospital and to all of your appointments

For information call 613-721-2000 extension 2920 between 8:00 am and 4:00 pm Monday to Friday
Your Health Care - Be Involved

- Be involved in your health care. Speak up if you have questions or concerns about your care.

- Tell a member of your health care team about your past illnesses and your current health condition.

- Bring all of your medicines with you when you go to the hospital or to a medical appointment.

- Tell a member of your care team if you have ever had an allergic or bad reaction to any medicine or food.

- Make sure you know what to do when you go home from the hospital or from your medical appointment.

Patient safety is very important to the Queensway Carleton Hospital and this information is provided to patients/families to help inform you of your essential role in your own safety.

The information contained in this booklet is not specific medical advice, nor a substitute for medical advice. For your safety, it is advised that you speak with your doctor and healthcare team about your particular health care needs.

Protect Yourself! Clean your hands frequently and ask your health care providers and visitors to do the same. Clean Hands Saves Lives.
Introduction

Welcome to Queensway Carleton Hospital.

You are being admitted for kidney surgery. You will be having a partial nephrectomy (part of your kidney will be removed) or a radical or simple nephrectomy where your whole kidney will be removed. The length of your hospital stay depends on your surgery, for minimally invasive laparoscopic surgery 2-4 days and for open surgery 4-6 days.

This booklet is intended to provide you with information to prepare you for your hospital stay and discharge. Your safety and complete recovery is our priority following your surgery. For this reason, we ask you to follow these instructions.

Please use this booklet as a reference tool. Bring this booklet with you to all your appointments and on your day of surgery. Ask questions if there is anything you don’t understand.

The healthcare team

Surgeon
Your Surgeon will discuss all aspects of your care including your surgery, recovery, discharge and follow-up. They will answer any questions you might have. Your Surgeon will oversee your care with the other healthcare providers.

Anesthesiologist
During your pre-admission appointment, the Anesthesiologist will discuss the anesthetic for your surgery and pain management after surgery.

Nurses
Registered Nurses/Registered Practical Nurses will care for you before, during and after surgery. They will provide emotional support, teaching, medications, and nursing care.

Social Worker
If there are any issues that may make it difficult for you to manage at home a Social worker is available.

All team members involved will assist you with discharge planning.
Nephrectomy (kidney removal) surgery

The kidneys
The kidneys are fist-sized organs about 10 cm (4 inches) long. They are located in your back above your waistline and are protected by your ribs. The kidneys remove excess fluid and waste material from the blood. They play a role in red blood cell production, bone formation, blood pressure control, and produce urine. Urine collects in the middle of each kidney in an area called the renal pelvis. Urine then drains from the kidney through a long tube called the ureter, to the bladder where it is stored. A kidney can be removed for various reasons including trauma and cancer. A healthy single kidney is capable of maintaining normal urine production.

Nephrectomy (kidney removal) surgery

There are 3 types of nephrectomy surgery:
- simple (total removal of the kidney)
- partial (removal of only a portion of the kidney)
- radical (removal of the entire kidney, the fat around the kidney, and possible removal of the associated adrenal gland and regional lymph nodes)

Nephrectomy surgery can be performed two ways:

1. Minimally Invasive (laparoscopic) nephrectomy surgery
Laparoscopic nephrectomy is the removal of part of the kidney or the entire kidney using a laparoscopic technique.

The laparoscopic nephrectomy is done using the laparoscopic instruments.
This technique uses a telescope, a video camera, and specially designed instruments. Using the laparoscope the Surgeon only needs to make 3 or 4 small incisions. The kidney, either part of it or all of it, is then removed through a very small incision in the lower part of the abdomen. The incisions are usually closed with clips (like staples) or dissolvable sutures. The surgery is performed under a general anesthetic and takes anywhere between 3 and 7 hours (partial kidney procedures take longer). After surgery, you will awaken in the Post Anesthetic Care Unit (PACU). After a couple of hours in the PACU you will be transferred to a hospital room.

2. Open technique
In the open technique the Surgeon removes part of the kidney or the entire kidney through an incision (surgical cut) between 15-30 cm (6-12 inches) long. This incision is made in one of two main locations: in the side of the body or just under the ribs to allow the Surgeon access to the kidney while only minimally disturbing the abdominal organs.

![Incisions for laparoscopic technique](image1)

![Incision for open technique](image2)
Where do I go for my pre-operative assessment visit?

Report to the QCH main lobby information desk. You will be directed to the Patient Registration Department to be registered and then to Pre-Operative Assessment Clinic (POAC).

When is my appointment?

The Operating Room Scheduling Department at the Queensway Carleton Hospital will call you with your appointment information. Your Pre-Operative Assessment Clinic (POAC) appointment is on

___________________________ at___________________________

If you have any questions about your appointment please call the Operating Room Scheduling Department: Monday to Friday, 8 a.m. to 4 p.m. at 613-721-2000, ext. 2614.

Your date of surgery is: ________________________________

(yy/mm/dd)

Call Queensway Carleton Hospital Operating Room Scheduling Department on the day before your surgery is scheduled to get the time for your admission. The number to call is 613-721-4840 between 11 a.m. and 3 p.m., Monday through Friday.

Call for your admission time on ________________________________

(yy/mm/dd)

NOTE: Notify your Surgeon before your surgery if you develop a cold or any other illness.

On the day of your Pre Op Assessment Clinic visit we advise you to purchase 2 scrub brushes of Chlorhexidine soap. They can be purchased at the QCH Gift Box on the main floor next to the front lobby.

Gift Shop Hours
Monday to Friday 9 a.m. to 4 p.m. and 5 p.m. to 8 p.m.
Weekends 12 p.m. to 4 p.m.
Your surgery day

How do I prepare for my surgery?

You must follow these rules if you are to have your surgery on the scheduled date:

• **DO NOT EAT ANY SOLID FOOD AFTER MIDNIGHT THE NIGHT BEFORE YOUR SURGERY OR YOUR SURGERY WILL BE CANCELLED.**

• You should drink one cup (250 mLs) 8 ounces clear fluid e.g. apple juice, water or ginger-ale™, before leaving to come to hospital.

You should take your regular prescription medications with water the morning of surgery. **Bring your medications including any inhalers with you to the Hospital.**

You may also be asked to stop taking medications such as Vitamin E, ginkgo biloba, omega, garlic or ginseng at least one week before surgery. These medications “thin” your blood, which could cause excessive bleeding during and after surgery. Check with your Surgeon.

• **Skin preparation:** Stop shaving in the operative area one week (7 days) before your surgery date. Shaving can cause tiny nicks in the skin that may allow germs to enter your body and cause an infection. **Do not use bath scents, powders or body lotions.**

Skin preparation:

1. The night before surgery bath or shower and wash your entire body using the Chlorhexidine soap.

2. The morning of surgery repeat your bath or shower using Chlorhexidine soap sponges.

• If you are a smoker, stop smoking 24 hours before your surgery. We can provide you with smoking cessation support to prevent nicotine withdrawal during your hospitalization.

• Do not drink alcohol 24 hours before surgery.

• On the day of surgery do not apply deodorant, powders, and body lotions or insert contact lenses. **Please do not wear any scented products because some people are allergic to them.**

• Do not bring valuables (jewellery, credit cards, and money) to the Hospital. We do not assume responsibility for lost or stolen articles.
• Arrange for someone to drive you to the Hospital the day of surgery, and drive you home on your discharge day.

What should I bring to Hospital?

• All medications in their proper bottles including eye/ear drops, creams, inhalers, vitamins, herbals, and all over-the-counter medications.
• Dressing gown.
• Non-skid slippers.
• Comfortable clothing, for example: pyjamas, and clothes to wear home.
• Toothbrush, toothpaste, soap, shampoo, deodorant, Kleenex™, razors these items are not supplied by the hospital.
• Please label any equipment brought from home with your name on it.
• A list of allergies including the type of reaction.

What happens the day of my surgery?

• On arrival to the Hospital; report to the Patient Registration Department on the main floor. Please bring your health card and medications with you.
• From Patient Registration you will be taken to the Day Surgery Unit (DSU). A care partner can accompany you and remain with you until you go to surgery.
• After you arrive at the Day Surgery Unit (DSU), you will change into a hospital gown and your clothes will be placed in a bag for later transfer to your room.
• A Nurse will complete the paperwork for your admission to the hospital.
• The Nurse will start an intravenous by inserting a small needle into your arm or hand. Prior to the surgery you will receive an antibiotic through the intravenous.
• A Nurse or Ward Assistant will take you to the Operating Room.
• You will talk to your Anesthesiologist and Surgeon in the waiting area.
• Your surgery will last about 1-2 hours.
• After your surgery, you will go to the Post Anesthetic Care Unit (PACU) for monitoring.
• The Nurse will check your blood pressure, pulse, and operative site frequently. You will have an intravenous. A urinary catheter will be in place connected to a continuous bladder irrigation set up.
• You may have oxygen provided.
• If you feel any pain or nausea, inform the Nurse. You will be given medication to help with this.
• You may be drowsy after the surgery, as you become more alert we will encourage you to do deep breathing and ankle exercises. These exercises will help to prevent complications.
• Your family will be able to visit you after you are admitted to your room. They can also bring any extra personal toiletries and clothing at this time.

After surgery
Assessments
The Nurse will check you often to ensure that you are comfortable and progressing well. Your temperature, heart rate, blood pressure, and abdominal dressing are checked. The Nurse will also listen to your lungs to check your breathing and your abdomen to check your bowel sounds. You will also be asked about “passing gas” and bowel movements.

Intravenous
You will have an intravenous (IV) to replace your fluids until you are able to drink and eat well. Do not pull on the intravenous (IV) tubing. When you are walking, use your hand that does not have the intravenous (IV) to push the pole.

Support stockings
Your Surgeon may order support stockings for you. Support stockings are long elastic stockings. These stocking may help to improve circulation in your legs. They are to be worn until you are walking frequently.

Pain management
Pain management is very important for a quick and speedy recovery. The Anesthesiologist will discuss different management options with you.

Inform your Nurse if you are uncomfortable or having pain. You may also experience bladder spasms which may feel like a muscle cramp that comes and goes in waves. Pain medication will help to relieve the spasms. If your pain medication does not seem to be working inform your Nurse. Your Nurse will check and assess your level of pain. If you are still uncomfortable and the Nurse has checked and assessed your pain level, your Nurse will notify your Doctor and your dose will be adjusted as required. You will be discharged home with a prescription for medication to manage your pain.
Pain scale ruler

What is a pain scale ruler?
A pain scale ruler is a simple tool to measure how much pain you are having. Each Nurse will use this ruler to measure your pain.

Why do we measure your pain?
We measure your pain frequently so that we can be sure your pain medication is working.

What does a pain scale ruler look like?
One side of the ruler has numbers from 1 to 10. The other side has colors from white to deep red (shown here in shades of grey).

How does our pain scale ruler work?
Our ruler measures pain in two ways – by number or colour.

By number: the ruler is numbered from 0 to 10, with 0 being no pain and 10 being the most severe pain you can imagine.

By faces: the faces are coloured and range from happy, with 0 being no pain as shown with a clear face to sad with 10 being the most severe pain you can imagine as shown with a deep red face. (Shown in this example as shades of grey).

The Nurse will show you the ruler and ask you to choose a number or colour.
Deep Vein Thrombosis (DVT)
Deep vein thrombosis can be a complication of surgery. It is a blood clot that may develop in a deep vein, usually in the leg. This can happen if the vein is damaged or if the flow of blood slows down or stops. A deep vein thrombosis (DVT) can cause pain in the leg and can lead to complications if it breaks off and travels in the blood stream to the lungs. When a clot forms it can either partially or totally block the blood flow in that vein.

Symptoms of a deep vein thrombosis (DVT) include:
- Swelling of the leg
- Warmth and redness of the leg
- Pain that is noticeable or worse when standing or walking

These symptoms are not always a sign of a deep vein thrombosis (DVT), but anyone who experiences them should contact their Doctor immediately or go to the nearest Emergency Department to be assessed. Your Doctor will take steps to reduce your risk of developing a blood clot while you are in the hospital.

These may include one of the following:
- Blood thinning medication in the form of a daily injection
- Walking
- Ankle and leg exercises

Your Doctor will advise you if you are to go home with blood thinners.

Protecting your skin from pressure ulcers
Are you at risk for developing a pressure ulcer (bed sore)? A pressure ulcer is a sore that develops, usually from sitting or lying in the same position for long periods of time or from sliding down in the bed. It is most often seen over the tailbone and heels. Some of the key things that can be done to help prevent these sores are to avoid sitting in bed with the head of the bed higher than 30 degrees for long periods of time, reposition yourself or ask for help, about every 2 hours, and use pillows under your legs, to avoid having your heels directly on the bed.
Getting out of bed

• Roll onto your side and bring your knees up towards your abdomen.
• Place your upper hand on the bed below your elbow.
• Raise your upper body off the bed by pushing down on the bed with your hand.
• Swing your feet and legs over the edge of the bed and bring your body to a sitting position.
• Once in the sitting position, take a few breaths and ensure your balance is good before attempting to stand.
• Slide your bottom to the edge of the bed.
• Stand up keeping your back as straight as possible.
• When getting back into the bed, reverse the process.

Operative site

Your incisions will have been closed either with dissolvable sutures or staples. If dissolvable sutures were used, they will be covered by Steri-strips™, which look like small strips of tape. Steri-strips™ fall off on their own eventually. Staples have to be removed. Your Surgeon will make arrangements for this to be done at the appropriate time post-operatively. In both cases there will be dressings over the incisions which the Nurse will change periodically. If your incisions are dry, you may be allowed to shower. If there is any significant drainage, the Nurse will change the dressing periodically and you should avoid showering.

Urinary catheter

You will have a urinary catheter to drain urine from your bladder. The Nurse will clean the insertion site of the catheter until it is removed. The Nurse will remove the catheter after a couple of days.
Diet
After your surgery you will progress from drinking just fluids to your regular diet. Unless your Surgeon has given you specific diet instructions, you should be able to resume a **regular diet with no restrictions in a few days**. The following are suggestions for the early days after your surgery.

- Try to eat 3 small meals plus 2-3 snacks daily until your appetite is back to normal.
- Eat slowly and chew your food well. It is important to drink plenty of fluids.
- Your body needs more energy and protein when recovering from surgery and during illness. Try to eat a protein rich food at each meal and snack (milk, yogurt, cheese, eggs, meat, fish or poultry).

Activity while in Hospital

- Once you are in your room, you will be helped to sit on the side of the bed. If you are feeling strong, you may get out of bed for a short period of time.
- On the day after your surgery you will be assisted in taking short walks in the hall at least 3 times.
- Two to three days after surgery you should be walking often in the hall. You will continue to increase your endurance. You should aim to be up and out of bed for a total of approximately 8 hours.

Discharge planning
When you are discharged from the Hospital, you may need some help at home. It would be best to arrange for this before being admitted to the Hospital. Arrange for someone to pick you up at 10:00 a.m. on the day of discharge. If you think you will have problems at home, discuss them with your Nurse or Social Worker. You will receive a follow up Doctor’s appointment and a prescription for medication.

Be sure you understand your:

- Medications
- Exercise program
- Diet
- Any restrictions regarding your surgery
• When to call the Doctor for symptoms
• Follow up appointments
• Preventing falls at home

Going home

Activity
• Take frequent rest periods as necessary. Let your body be your guide.
• Do light activities for 2 weeks. Avoid strenuous exercise including heavy lifting, lifting grocery bags, shoveling snow, or pushing a lawn mower until you have seen your Doctor on your follow-up visit.
• Increase your walking distance each day.
• Resume your usual activities gradually over 4 weeks if your surgery was done using the laparoscopy technique and 6 weeks if your surgery was done using open technique. Discuss any specific concerns with your Doctor including when to resume sexual activity.
• Do not drive a vehicle for at least 2 weeks. You may resume driving after two weeks if you are comfortable with this, and no longer on pain medication.

Medications
• Take your pain medication as required. It is normal to experience some incision discomfort for a period of time after discharge.
• To avoid constipation (a side effect of many pain medication) add water-soluble fiber to your diet e.g. bran, whole grains, fruit. If constipation is a problem, you may take a mild laxative.
• Do not drive a vehicle if you are taking narcotics. (e.g. Tylenol #3™, Hydromorphone, Percocet™).

Operative site
• You may take a shower. Clean your incision with mild soapy water. Dry well.
• You may take a bath once your incisions have fully healed.
• Observe the incision for redness, tenderness, or drainage. Contact your Surgeon if problems with your incision(s) develop.
• Swelling or bruising around the incision is common and will go away with time.

**Call your Surgeon if you have any of the following:**
• Chills or fever (oral temperature greater than 38°C or 100.4°F)
• Increased discomfort, redness, swelling, drainage or separation of the incision
• Nausea, vomiting, constipation, abdominal swelling
• Difficulty/discomfort passing urine
• Chest pain, or difficulty breathing
• New or unexplained symptoms

**If unable to reach your Doctor, please go to the nearest Emergency Department.**

**Follow-up appointment**
Your Doctor will make arrangements to see you in follow-up depending on the specifics of your procedure and other medical issues, usually within 8 weeks. Please contact your Doctor to confirm your follow-up arrangements after being discharged from Hospital.

**Notes**
Mission, Vision & Values

OUR VISION

We will be the community hospital of choice, recognized for our exemplary patient care, people and performance in a environment of innovation and strategic partnerships.

OUR MISSION

As a patient and family-centred hospital:

■ We provide a broad range of acute care services to the people of Ottawa and the surrounding region.
■ We respond to the needs of our patients and families through our commitment to exemplary performance, accountability and compassion.
■ We partner with other health care and community service organizations to ensure coordinated and integrated care.
■ We actively promote a learning environment in which our staff, physicians, students and volunteers are progressive and responsive.
■ We are an active teaching partner with colleges, universities and other healthcare programs.

Our Cornerstone Programs are:

■ Emergency Services
■ Medical Services
■ Surgical Services
■ Geriatric Services
■ Acute Rehabilitation Services
■ Childbirth Services
■ Mental Health Services

OUR VALUES

■ Accountability
■ Innovation
■ Respect