Living kidney donor

patient information
Thank you for offering to donate your kidney. You are giving someone a very precious gift.

Please read this booklet carefully, so that you understand the operation and its effects on you. If you have any questions then please contact the living donor nurses using the contact information at the end of this booklet - it is their job to guide you through the whole process.
PRE-ADMISSION VISIT

One week before the operation you and the kidney recipient will attend an appointment to see one of the living donor nurses. At this appointment all necessary investigations, such as blood tests, urine tests and microbiology swabs will be carried out in preparation for your surgery. We also repeat the blood test which was carried out at the start of the process to check your tissue compatibility - this is called the final crossmatch.

At this appointment you will be given information regarding your admission and you will have an opportunity to discuss any concerns. You will also be seen in the pre-operative assessment clinic where all of the paperwork for your admission will be completed.

If you are a smoker it is strongly recommended that you give up at least 6 weeks prior to your operation, as this will reduce the risks of you developing complications after surgery.

We would also advise that women taking the oral contraceptive pill (OCP) start to use an alternative method of birth control and stop taking the OCP at least one month before surgery.

ADMISSION TO THE HOSPITAL

We admit patients to the hospital on the day of their operation. A hotel room near the hospital can be arranged for the night before your operation if you wish. The night before surgery you should not eat anything after midnight but you can drink water up until 6am on the morning of surgery, unless you have been told otherwise. In addition you will be given some "pre-op" drinks to aid your post-operative recovery,
which you should drink in the day leading up to the operation. Your living donor nurse will provide you with further information about this.

You will be admitted to the surgical admissions area (SAA) on the morning of your operation. The nursing staff will be fully aware of your pending surgery and can answer any last minute questions. You will be seen by an anaesthetist to discuss the general anaesthetic and the pain relief you will receive. You will also be asked to put on a hospital gown and compression stockings, which reduce the risk of deep vein thrombosis (blood clot in the leg veins). A nurse will accompany you to theatre.

THE OPERATION

The kidney that you are donating will be removed by laparoscopic (keyhole) surgery. This is called a laparoscopic nephrectomy (nephrectomy means the surgical removal of a kidney) and will be performed under general anaesthetic. The operation is performed through four small incisions on your abdomen and a larger incision just above your pubic hair line, through which the kidney is removed at the end of the procedure. Keyhole surgery reduces the length of time that you spend in hospital and allows you to resume your normal life more quickly when compared with open surgery. You should expect to stay in hospital for three days.

If the kidney cannot safely be removed via keyhole surgery, the procedure will be converted to an open operation, during which the kidney is removed through a larger incision just below the ribcage. This occurs in approximately 2% of kidney keyhole operations. If this happens, your hospital stay will be extended to 6-8 days. Your safety is our priority.
AFTER THE OPERATION

When you wake up you will be in the recovery room, where you will be observed for approximately one hour after the operation has finished. Following this you will be transferred to the ward, where the nursing staff will closely monitor you, recording your blood pressure and pulse at regular intervals for the first 24-48 hours. You will be encouraged to perform deep breathing exercises and to move about as much as possible after the operation to reduce the risk of complications. If required, the nursing staff will assist you until you are able to do things for yourself.

Oxygen therapy

You will have some oxygen therapy via a face mask or in the form of a small tube in your nose. As you breathe normally, you will breathe in the oxygen. This usually remains in place for one day after surgery.

Catheter

While you are asleep in theatre a catheter will be put in place to drain the urine from your bladder. The amount of urine you pass will be monitored regularly. The catheter is usually taken out on the first day after the operation.

Pain relief

You should expect to experience some discomfort after the operation and will be given pain relief. To minimise discomfort, a special local anaesthetic injection is given during the operation, which reduces post-operative pain.

Pain relief is also given in the form of patient controlled analgesia (PCA). PCA is a system that allows you to give yourself pain relief. The painkiller is in a syringe in
a machine. You will be given a button to hold, which can be looped around your wrist. When you feel pain, press the button and a dose of the painkiller goes in to your bloodstream. This starts to work within minutes. You will be closely monitored while you are using PCA and it is important to remember that the machine is programmed so that you cannot overdose. Sometimes the painkiller can make you feel sick and the nursing staff can give you an injection to counteract this.

Being comfortable will aid your recovery. If you are in pain you may not be able to move freely, cough or take proper deep breaths and this could increase the chance of developing a chest infection.

**Preventing deep vein thrombosis (DVT)**
For your entire hospital stay, you will continue to wear your compression stockings and also be given daily injections to help reduce the risk of DVT.

**Eating and drinking after surgery**
Immediately after the operation you will be able to drink, beginning with water, then tea, coffee or juice. For the first few hours you will also be given intravenous fluids (a drip) to provide you with the hydration you require. Once you are able to tolerate fluids, you will be taken off the drip. From the first day after the operation you will be able to eat a light diet and gradually build up to eating normally.

**Sutures (stitches)**
Your wounds will have dissolvable sutures. These can take up to three months to fully dissolve and you may experience some itching until then. Your wounds may also be sealed with steristrips (butterfly stitches).
These are thin sticky strips which pull the edges of the wounds together and are usually left in place until they naturally start to fall off. You will have dressings over the wounds. These will be removed when the wounds are clean and dry.

**Going home**

When you first leave hospital it is common to feel tired. As soon as you feel able, take gentle walks but avoid vigorous exercise such as running or cycling for at least six weeks. More strenuous activities, such as heavy lifting and digging, should be avoided for three months after your operation. This allows the muscles to heal, avoiding the risk of a hernia (a weakening in the muscle wall).

You may experience twinges of pain and aches for up to three months after surgery. These are normal and are due to the layers of tissue and muscle healing together. As wounds heal they may develop scar tissue along them which can feel hard and occasionally lumpy. If you have any concerns please contact the living donor nurses.

**Pain relief**

You will be given painkillers to take home with you and will be advised how to take them. As you recover you will find that you will need to take them less often. You may also find it more comfortable to wear loose fitting clothes for the first few weeks after the operation, as your stomach may still feel quite swollen and bloated.
Eating and drinking
When you go home you can eat whatever you like, but we recommend a healthy, balanced diet. High salt foods such as ready meals should be eaten in moderation. When you are no longer taking painkillers you can drink alcohol in moderation. It is advisable to stick to the recommended maximum daily amount of three-four units for men and two-three units for women.

Constipation
Constipation is common after this type of operation. This can be improved by eating fresh fruit, vegetables, wholemeal bread and cereals. Drink plenty of fluids each day as this will help alleviate constipation and will also hydrate your remaining kidney.

Bathing/showering
Your dressings will be changed by the nurses before you leave the ward and if required your nurse will give you some spare dressings to take home with you. If the wounds are clean and dry on discharge you will be able to have a shower at home (usually with the dressings on). You should not have a bath for the first few weeks after the operation.

Driving
You should not drive for 4-6 weeks after your operation or until you can comfortably wear a seatbelt and feel you are able to perform an emergency stop. It is advisable to check with your car insurance provider.
Work
The length of time you should wait before returning to work depends on the type of job you do. If you have a manual job that entails heavy lifting you will need a minimum of two months and perhaps as much as three months off work. If you have a non-manual job then you may feel ready to return at four to six weeks after the operation. It is important to allow yourself sufficient recovery time. Some employers offer a phased return to work. After you are discharged you will need to make an appointment with your GP to obtain a fitness to work certificate.

Travel
Avoid flying abroad for six weeks after surgery. This is because flying increases the risk of you developing DVT. If you are planning a trip it is advisable to speak to your GP or living donor nurse for advice. After this period you should take certain precautions such as drinking plenty of fluids and avoiding alcohol if flying long-distance. You should try to move around during the flight and wear flight socks.

Wound pain or discomfort
Following the operation scar-related pain and discomfort can arise which can sometimes be quite prolonged.
FURTHER ADVICE

Before you leave the ward you will be given an appointment to see the living donor nurse at 7-10 days after the operation. At this appointment you will have a blood and urine test, your blood pressure and temperature will be recorded and your wounds will be looked at. You will receive an appointment to see a surgeon at 4-6 weeks after surgery.

After any operation it is common to feel emotional and anxious during the initial recovery. If you have any concerns please contact the living donor nurses who will be there to help you during this time.

There are risks associated with any operation. The risks associated with laparoscopic nephrectomy are described in detail below. Please contact the living donor nurses or attend your GP practice if you experience any of the following after being discharged from hospital:

• Chest infection – this may occur as a complication of the general anaesthetic

• Wound infection – if any of the wound sites become red and hot to touch it may mean that you have a wound infection and may need a course of antibiotics.

• Urine infection – there is a risk of a urine infection after the operation due to the catheter. Your urine will be checked regularly but if you notice it becoming cloudy or develop an offensive smell you should contact your GP who may need to prescribe some antibiotics.
Very occasionally, patients undergoing laparoscopic nephrectomy can develop serious complications after they have been discharged from hospital. If you have abdominal pain, which is not relieved by your painkillers, start vomiting and are unable to keep down fluids, have shortness of breath, chest pain, or a painful swollen leg please contact us urgently or attend your local A&E department.
SERIOUS OR FREQUENTLY OCCURRING RISKS RELATING TO THE OPERATION

Common (greater than 1 in 10)
- Temporary shoulder pain and/or abdominal bloating caused by the gas used to fill your abdomen during the operation.
- Temporary altered bowel habit.

Occasional (between 1 in 10 and 1 in 50)
- Urinary tract infection, which requires antibiotics.
- Wound infection requiring antibiotics.
- Incisional (wound) hernia.
- For men, testicular pain on the side of the donated kidney.

Uncommon (less than 1 in 50)
- Bleeding requiring conversion to open surgery and/or a blood transfusion.
- Injury to organs such as liver, spleen, bowel and pancreas or blood vessels requiring conversion to open surgery (or re-operation).
- A collapsed lung requiring temporary insertion of a drain into the chest.
- Post-operative pneumonia (chest infection).
- Pulmonary embolism (blood clot in the lung) and/or DVT.
- Cardiovascular complications including a heart attack.
- Post-operative bleeding requiring re-operation and/or blood transfusion.
FOLLOW-UP

After donation, your remaining kidney increases in function to compensate for the loss of the other kidney. This happens over time and you will eventually be left with approximately 75% of your previous kidney function. We recommend a yearly follow-up appointment for life with the living donor nurses at the Royal Free or with your own GP.
CONTACT INFORMATION

Living donor nurses:
Alison Richardson
Bethan Hood
Catherine O’Malley

Direct line: 020 7317 7604
Email: RFH-Renal-LivingDonorNurses@nhs.net

Out-of-hours emergency contact details
For urgent or emergency issues at evenings or weekends following surgery, please contact the Royal Free Hospital switchboard on 020 7794 0500 and ask to speak to the “on-call renal registrar”
If you would like a large print or audio version of this information, please ask a member of staff.