The Oxford Transplant Centre

The Live Donor Programme and Laparoscopic Donor Nephrectomy

Information for donors
Useful contact telephone numbers and addresses

Churchill Hospital
Old Road
Headington
Oxford OX3 7LJ
Tel: (01865) 741841
Fax: (01865) 226196

Live Donor Nurses
Sandra Dix  (01865) 226107
Nicki Hayward  (01865) 226097

Live Donor Team Secretary
Lynn Charles  (01865) 225805

Wytham Ward  Visiting Times 14.00-21.00
Nurses Desk  (01865) 235108 or 235011

Renal Ward  Visiting Times 15.30-20.00
Nurses Desk  (01865) 225780
Patient Telephone  (01865) 225787

Renal and Transplant Outpatients (Appointments)
(01865) 225355, (01865) 225356 and (01865) 225793

Secretary Consultant Surgeons
Tracy Waine  (01865) 226109

Secretary to Medical Assessors
Dr Paul Harden  (01865) 225614
Dr Phil Mason  (01865) 225802
Dr Chris Winearls  (01865) 225804

Patient Transport Service
0845 330 8888

Transplant Pharmacy  (01865) 226095
Introduction

The information in this booklet will help familiarise you with what to expect from the Oxford Live Donor Team and the assessment process within the Oxford Transplant Centre. It also describes the operation to remove the donor kidney – called laparoscopic donor nephrectomy. If this operation is to go ahead you will be given another booklet giving more details about what happens when you come into hospital and afterwards. You should already have been given a booklet called “Your Questions Answered: Medical Information” and the “Gift of Life” DVD.

It is a good idea to write down any questions you may have. At the end of the booklet there is a section to do this and to make notes if you would like to.

Donor Types

There are different types of kidney transplants performed:

- **Living Related**
  This is where a person donates to a related family member: e.g. mother to son, father to daughter, sibling to sibling.

- **Living Unrelated**
  This is where a non-family member donates, e.g. husband to wife, friend to friend.

- **Paired Exchange**
  When a donor and recipient are incompatible or mismatched with each other, either by blood group or by tissue type, it may be possible for them to be matched with another donor and recipient pair in the same situation and for the kidneys to be exchanged or swapped. More information about this programme can be found in the separate leaflet “Paired Donation”.

- **Non-directed altruistic donation**
  This is where a person volunteers to donate a kidney to an unknown recipient, that is, someone they have never met before and who
is not known to him/her. More information about this type of donation can be found in the leaflet “Altruistic Donation”.

• **Desensitisation Programme**
  This is when a donor and recipient are incompatible or mismatched with each other, either by blood group or by tissue type, and have been unsuccessful within the paired exchange programme. It may still be possible to donate directly after the recipient has had desensitisation treatment (in carefully selected cases).

### Assessment Clinics

You may have up to six clinic appointments to attend during the investigation process.

The assessment process can take between 3-4 months, from the time you are considered suitable to proceed. If you need extra investigations to establish whether you can proceed with donation, it may take a little longer.

More information on the investigations required is outlined in the “Your Questions Answered” booklet.

At any time during the process, you may decide not to continue. There is no obligation to donate once you have started the process if you change your mind.

Your results and how you are progressing through the assessment are confidential and will not be discussed with the person to whom you are donating.

### Live Donor Clinic 1

The first clinic appointment that you will be invited to is an initial consultation. You will attend with the person you wish to donate to. You will be given all the information needed to make an informed decision as to whether you wish to proceed. We will offer to take blood samples to assess your compatibility at this visit. In some situations you may have had blood tests done already at another hospital. There is a list of the blood investigations that we take at the back of this leaflet.
The results of these tests take a few weeks to analyse. The Live Donor Nurse will write to you with the results and you will be asked to discuss the results with the person you want to donate to. The results are confidential.

**Live Donor Clinic 2**
If you wish to continue to donate you will need to contact the Live Donor Team to inform them of your decision. You will then be invited to a second appointment where you will be assessed from a surgical and medical point of view to make sure that you are fit for the donation operation (known as a nephrectomy). This appointment also involves further bloods and urine samples, a tracing of your heart, a chest X-ray and an ultrasound of your kidneys.

Once you are considered medically suitable to donate you will be invited to attend for further investigations to establish your kidneys’ function and anatomy. The Live Donor Nurse will explain these tests in more detail at the appropriate time. A clinical Psychologist and Consultant Psychiatrist may also see you as part of your assessment.

**Independent Assessment – Human Tissue Act**
You and the person you are donating to will need to be seen by an Independent Assessor to comply with the Human Tissue Act. You will be given a separate leaflet about this.

**Pre Assessment Visit – 2 weeks before surgery**
Your final appointment will be to meet the surgeon who will be undertaking your operation. This will be Professor Peter Friend, Mr. Sanjay Sinha or Mr. Mark Sullivan (Consultant Surgeons). They will talk to you in detail about the operation and the benefits and risks and then ask for your written consent for the operation to go ahead.

The operation is carried out under general anaesthetic. The Anaesthetist, usually Dr. Andris Klucniks or one of his colleagues, will see you in the same clinic and discuss the various options with you. You may also meet the Pharmacist and other members of the team.

You will have an opportunity to talk to one of the Live Donor Nurses who will explain what is likely to happen when you are admitted
to hospital and during your stay and what to expect during your recovery. You will also have some final investigations, e.g. blood tests in preparation for surgery.

**Before the operation – Oral contraception, HRT or complimentary medicines**

If you are taking the oral contraceptive pill or hormone replacement therapy then these medications need to be stopped six weeks before the date of your surgery. You must stop any herbal and complimentary medications two weeks before surgery. If these instructions are not followed it may result in the operation being postponed.
Patient Pathway

**Live Donor Clinic 1**
Potential donor(s) and recipient attend an appointment with the Live Donor Nurse. At this consultation the nurse will explain the process and answer any questions you may have. Initial bloods samples will be taken to establish compatibility.

The Live Donor Nurse will write to the potential donors with their results. The results can take up to 2-3 weeks to be available. **The Live Donor Nurse will then await contact from the donor to find out how they wish to proceed.** If they do wish to proceed, Live Donor Clinic 2 is arranged.

**Live Donor Clinic 2**
Donor attends for further investigations, including blood samples, urine samples, chest X-ray, ECG and ultrasound of your kidneys. The donor is seen by a Consultant Surgeon and Physician for a medical assessment. It may be possible for the Physician to see you on the same day. You will be notified in writing if this is the case. If not, you will be sent a separate appointment to attend.

The results of the tests completed at this visit will be reviewed and discussed by the Transplant Team.

**Independent Assessment – Human Tissue Act**
The Live Donor Nurse will arrange an appointment for both donor and recipient to see the Independent Assessor in order to fulfil the legal requirements of the Human Tissue Authority. You will also be asked to provide evidence of your relationship, e.g. birth certificates, marriage certificate or family photographs, and to take photographic identification to the appointment.
The donor will have specific X-rays and scans to establish function and anatomy of the kidneys. These results are discussed by the Consultants and if satisfactory then a transplant date can be agreed.

**Pre Assessment Visit**
Both donor and recipient will be asked to attend the Transplant Centre 2 weeks before the date of the transplant so that the final preparations can take place. This is to make sure the transplant can proceed safely and that both donor and recipient can provide valid consent for surgery.

The assessment process can take between 3-4 months.
There are two types of operation performed to remove the kidney: open (traditional) or laparoscopic (more commonly referred to as key-hole). At the Oxford Transplant Centre all the operations are performed laparoscopically. The Consultant Surgeon will discuss the operation once all the tests have been completed. The operation is carried out under a general anaesthetic. You will be admitted to the Day Surgery Unit and transferred to the Transplant or Renal Ward after the operation.

The operation will be performed by Professor Peter Friend, Mr. Mark Sullivan and / or Mr. Sanjay Sinha (Consultant Surgeons).

Three or four 2 cm holes (occasionally more) are made in the tummy. The location of these holes will depend on whether the right or left kidney is being removed. A telescope attached to a camera is passed through one of these holes to allow the surgeon to see pictures of the inside of the abdomen on a television monitor.

Instruments are passed through the other holes. The kidney is separated from its neighbouring structures and attachments until it is attached only to the vessels taking blood in and out of the kidney and the ureter (the tube which takes urine from the kidney to the bladder).

At this stage, a 6-8 cm cut is made in the lower part of the abdomen. The ureter and the blood vessels are then stapled and divided and the kidney is removed through this cut.

Your wounds are normally stitched with internal dissolvable stitches so they do not need to be removed.

The operation takes two to four hours.

Full details of what happens when you come into hospital and afterwards are contained in our booklet “Laparoscopic donor nephrectomy.” We will give you a copy of this booklet once it has been confirmed that the operation is to go ahead.
A kidney from a living donor can be removed in a minimal invasive procedure called laparoscopic nephrectomy.

Four small incisions are made in the abdomen so that instruments can be inserted; the surgeon then retrieves the donated kidney through a fifth, slightly larger incision.

Previously, surgeons retrieving a donated kidney had to make a much longer incision and remove a rib to get to the organ.
What are the benefits of the operation?

Please see the booklet “Living Donor Kidney Transplantation – Your questions answered”.

What are the risks of the operation?

There are risks and benefits associated with living kidney donation for the prospective donor and the recipient. Full details of all the risks and benefits are contained in the booklet “Living Donor Kidney Transplantation – Your questions answered.”

• All surgery carries risks, no matter how small. The most common risks associated with a nephrectomy are usually relatively minor and can be treated appropriately. These include wound, urinary tract and chest infections (1 in 3 donors).

• More serious complications, such as bleeding that requires blood transfusion, or blood clots, occur in approximately 1 in 50 (2%) donors. The healthcare team is experienced in dealing with such situations quickly and appropriately.

• Rarely, one in 3,300 donors dies as a result of the operation. The most common causes of death are pulmonary embolism (blood clot in the lung) or heart attack. However, the chance of this happening has been compared to the risk of having a fatal road accident.

• The rigorous assessment process and dedicated hospital care aim to minimise these risks, but cannot remove them completely.

• Post-operative pain can usually be controlled with painkillers, but 3% of donors may still suffer from pain one year after the operation.

• If there are any technical difficulties during the operation and the surgeons feel that it would not be safe or appropriate to continue with keyhole surgery, then the operation will be converted to an open operation. This would involve opening the abdomen with a longer cut and freeing and removing the kidney from the surrounding structures by standard open surgery. The chances of conversion from a keyhole technique to open surgery are approximately 1 in 40.
What are the alternatives?

The operation to remove a normal kidney for live donation can also be done by the open technique. This would involve a longer cut along the upper part of the tummy.

The disadvantages of the open operation are:

- a larger scar
- weakness of the muscles with a tendency to develop a bulge in the line of the scar
- higher chance of chronic pain in the scar
- longer hospital stay
- and a delayed return to work, compared to the laparoscopic (keyhole) operation.

In about 1 in 40 cases the keyhole approach may need to be converted to the open approach during the operation in order to safely take out the kidney. Thus by agreeing to undergo the keyhole operation you are also consenting to have the abdomen opened using the older conventional open surgical cut in case of difficulties.

Day of Surgery

On the day of surgery you are admitted to the Day Surgery Unit from where you will go directly to the operating theatre. Before the procedure you will be seen by the surgeons who will go through the consent form and mark the side of your body where the operation will take place. You will be taken to theatre in the morning and the person who is receiving the kidney will be taken to theatre in the afternoon.

Very occasionally your operation may be delayed or cancelled due to unexpected emergencies or a bed crisis within the hospital. In the unlikely event of this happening, we will make every effort to reschedule your operation at the earliest opportunity.
During the operation

Once you are put to sleep with a general anaesthetic the staff will position you for the operation. The surgeons then start the procedure and the operation itself will take approximately two to four hours.

If there are any technical difficulties during the operation and the surgeons feel that it would not be safe or appropriate to continue with keyhole surgery, then the operation will be converted to an open operation.

After the operation

We expect you to be up and fully mobile within 24 hours of the operation.

You will have a control button for a device called Patient Controlled Analgesia (PCA) which allows you to give yourself pain relief when you need it by pressing the button. You are likely to need to take oral painkillers for a week or two.

Most people can resume limited normal activities the next day and most people are able to leave hospital after three days. The actual time that you stay in hospital will depend on your general health, how quickly you recover, and your doctor’s opinion.

You should be able to return to work after about 6 weeks, but this depends on your usual health, how fast you recover and what type of work you do.

Follow-up

You will be asked to attend an appointment with the Consultant Surgeon 6 weeks after your operation to make sure that you have recovered as we would expect. Thereafter you will be invited to attend an annual follow-up appointment here at the Oxford Transplant Centre. This will involve a general health check including blood tests, blood pressure, weight and a urine test. You will then be referred back to your GP for this annual check.
Further information

Living Donor Kidney Transplantation – Your Questions Answered. (NHSBT)

Gift of Life (DVD) – can be obtained from the transplant centre or view on the website www.nhsbt.nhs.uk

Live Donor Nephrectomy – Oxford Radcliffe Hospital

You may find information on the following websites helpful:
http://www.uktransplant.org.uk

http://www.kidney.org.uk/living-donor/

The following information is meant as a general guide to the understanding of your blood results. There is often a wide range of normality and to be outside this range for any given test does not necessarily imply an illness or disease process.

The haematology blood screen is generally involved with the red and white cells of the blood, whilst the biochemistry screen is closely involved with the function of important body organs such as the liver and kidneys and the chemical environment of the body.

**Haematology profile**

Haematology An estimation of the haemoglobin, the oxygen carrying capacity of the blood. Low results are known as anaemias and raised levels as polycythaemias.

White cells Increased primarily in bacterial infections.

Platelets The rods in the blood which are responsible for blood clotting.

**Biochemistry profile**

Urea A kidney function test. Urea increases with age. Raised when there is deterioration of kidney function and dehydration.

Creatinine Another waste product of the kidney and a rather more sensitive indicator of early kidney failure than the blood urea.

Glucose The blood sugar level that is increased in diabetes and some kidney, thyroid and pituitary disorders.

Bilirubin The jaundice level, which is an important indicator of liver dysfunction. It can be raised in both liver and gall bladder disease.

Cholesterol Very important in the origin of coronary artery disease. Most is made in the body but some is of dietary origin, hence the importance of a healthy balanced diet.

**Virology** Samples are also tested for hepatitis B, C and HIV. Consent will be obtained before testing for these.
Main road network in and around Oxford (not to scale)
If you need an interpreter or need a document in another language, large print, Braille or audio version, please call 01865 221473 or email PALSJR@orh.nhs.uk