How are the surgeries done?

Donor (Living donor uninephrectomy) The operation to remove the kidney can be done by:

- + Open surgery, through a loin incision;
- + Laparoscopic surgery ('key hole' surgery), where cameras and tiny instruments are inserted into the abdomen through very small cuts (0.5 to 1.5 cm). These are used to separate the kidney and its attachments after which the kidney is removed through a second incision of five to seven cm at the lower abdomen. As the second incision does not involve cutting muscle, this method results in faster recovery for the donor than traditional open surgery.

The surgeon will choose the method most suitable for you.

Recipient

An incision is made in the lower part of one side of the abdomen. The new kidney is stitched into place within the pelvis and the incision is closed. The recipient's own kidneys are usually not removed.

Each surgery takes about three to four hours. Both donor and recipient will be monitored in a High Dependency Unit thereafter. The donor is usually discharged within three days after surgery while the recipient can be discharged within seven

When can a living donor kidney transplant be done?

A living donor kidney transplant can be done even before starting dialysis. This is known as a pre-emptive transplant. The transplant can also be done after starting dialysis.

What is the success rate for living donor kidney transplant?

At the end of the first year of transplant. more than 95% of patients have a functioning kidney and need not undergo dialysis. Over time, some kidney transplants are lost to rejection or other causes, but the average lifespan of a living donor kidney is more than 20 years.



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National University Centre for Organ Transplantation



Living Donor Kidney Transplant



Living Donor Kidney Transplant

What is a kidney transplant?

A kidney transplant is an operation in which a patient with kidney failure [the recipient] receives a kidney from another person [the donor]. Immunosuppressive medicines prevent rejection of the transplanted kidney and allow it to function like a normal kidney, cleansing the recipient's body of toxins, removing excess salt and water and producing hormones needed to maintain health. A kidney for transplant can be obtained from individuals who are alive [living donor] or those who have passed away in a hospital ICU [deceased donor].



Why a living donor kidney transplant?

In comparison to dialysis, kidney transplant recipients:

- + Live longer
- + Have better health
- + Have better quality of life
- + Have better ability to return to work
- + Have less restrictions on diet and fluid intake
- + Have more energy and less restrictions on physical activities
- + Have improved sexual function and fertility

In comparison to a deceased donor kidney transplant, a living donor kidney transplant:

- + Has better kidney function as a living donor kidney is generally healthier
- + Has a higher success rate
- + Eliminates the long waiting time while on dialysis

Who can be a living kidney donor?

A living donor can be:

- + Biologically related to the recipient, such as a parent, sibling, offspring or distant relative such as an aunt, uncle, cousin, nephew or niece
- + Emotionally related to the recipient, such as a spouse, friend or in-law
- + Occasionally, a stranger who wishes to donate a kidney to someone in need of a transplant (altruistic donor).

A living donor must be:

- + At least 21 years of age; older donors can be considered on a case by case basis
- + Free from the following conditions:
- Cancer
- Heart disease
- HIV infection or AIDS
- Diabetes
- Active Hepatitis B or C
- Kidney disease

What if the blood groups between the living donor and recipient are different?

A kidney transplant can be performed across different blood groups as long as they are *compatible*, as shown below:

Recipient blood group	Compatible donor blood group	Incompatible donor blood group
0	0	A, B, AB
Α	A, 0	B, AB
В	В, О	A, AB
AB	A, B, AB, 0	Nil

If the blood groups are incompatible, a living donor kidney transplant can still be done, although it carries a slightly higher risk of rejection.

Are there any risks to the living kidney donor?

A healthy individual can live a normal life with one kidney.

Kidney donation will not affect the health, life span or energy level of the donor as long as the donor has been carefully and thoroughly evaluated prior to the operation. Nevertheless, donors will be monitored lifelong as kidney donors may be at slightly higher risk for developing high blood pressure, protein in the urine or reduced kidney function in the long term.

The Transplant Operation

