

Kidney transplant – living donors



infoKID

Information for parents and carers about children's kidney conditions

This infoKID topic is for parents and carers about children's kidney conditions. Visit www.infoKID.org.uk to find more topics about conditions, tests & diagnosis, treatments and supporting information.

Each topic starts with an overview followed by several sections with more information.

» [Links to sections](#) in topic | [Other topics](#) available on website

A kidney transplant is an important treatment for children with established renal failure (ERF) – when the kidneys are in failure and cannot get better. This is the final stage of chronic kidney disease (CKD). A kidney transplant is currently the best treatment for almost all children with stage 5 CKD.

A healthy kidney is removed from one person (a donor) and placed in the body of another person who needs it (a recipient). Transplanted kidneys come either from a living person donating one of their kidneys, or from people who have recently died.

The first type of donor is called a living donor and this topic deals with the particular issues relating to living donor transplants.



→ We recommend you read [Kidney transplants – an introduction](#) first. For further information about deceased donors kidney transplants, read [Kidney transplant – deceased donor](#).

About living donors

These transplants are often more successful than deceased donor transplants. This is because the kidneys are often in better condition, and can often be more quickly transplanted.

→ The transplant surgery from a living donor is almost always planned well in advance. A kidney will be removed from the living donor, and then transplanted into your child as soon as possible and on the same day. The living donor may be in a different hospital, which treats adults.

Living related donor

Living donors are usually related to the child. This is often someone who is biologically related to the recipient – this increases the chances that the donor's kidney will be suitable. These living donors are known as **living related donors (LRDs)**.

Living unrelated donor

Unrelated family members may donate a kidney.

Altruistic donors

Some people choose to donate a kidney without a particular recipient in mind. They are known as **altruistic donors** and, though still fairly uncommon, the number of altruistic donors has increased in recent years. These donations are made available through the national transplant list, described above. They are anonymous, though you may be able to find out the sex and approximate age of the donor, and you will have a chance to write a letter to express thanks if you wish.

Paired exchange

Sometimes, when a donor and recipient do not have a match, it is possible to swap a donor kidney with another donor and recipient pair in the same situation. This is called a paired exchange, where each recipient receives a kidney from a donor they do not know. When more than two pairs are involved, it is called a pooled exchange.

Benefits of living donor transplants for the child

The outcomes of kidney transplantations from living donors are better than those from deceased donors. From 1997 to 2001, the percentage of kidney transplants in UK children that were working ten years after the transplantation was:

- deceased donor transplants – 64%
- living donor transplants – 71%.

If there is a suitable donor available, your child's **paediatric nephrologist** (doctor who treats babies, children and young people with kidney conditions) may encourage you to pursue a living donor transplant only.

» [More about receiving a deceased donor kidney and future living donors in Kidney transplant – Deceased donors](#)

Being a living donor

Potential living donors will have many tests to make sure they are prepared for the operation to remove a kidney and that they will be able to remain healthy with one kidney. They need to stay in hospital for 2-4 days or longer depending on their recovery, and then have time off work to rest, for between 6 weeks and 3 months. Donors may be paid for expenses and loss of earnings. Potential donors should speak with the transplant team and their employers for more information.

If you are considering being a living donor, speak with your child's transplant team. This is an important decision, and you will have many things to consider. The following resources may also help:

- [Could I be a living donor? \(NHS Blood and Transplant\)](#) – for general information about being a donor
- [Donating a kidney: What to expect \(British Kidney Patient Association\)](#) – for more specific information about the tests and surgery.

Matching

When a kidney – or any other body tissue – is transplanted from a donor to a recipient, the recipient's body recognises it as 'foreign' and tries to reject or destroy it. This happens because of the **immune system**, which protects the body against disease and infection. This is called **rejection**, and is the major complication of kidney transplantation.

To help reduce the risk of the new kidney being rejected, your transplant team will test both the potential living donor and your child, to ensure there is a 'close match'.

Blood tests before the transplant check for 'markers' on the body's cells. These markers are inherited from our mother and father. These tests help to find a donor who is a close 'match' to your child – which increases the chance of a successful transplant.

» [More about matching in Kidney transplant – an introduction](#)

Preparing for a living donor transplant

Where you will be seen

Most **paediatric nephrology units** do kidney transplantations in children. A few do not, but instead work with another unit to coordinate the surgery. You will probably continue going to your regular unit for tests. However, you may need to travel to another unit – which may be further away from your home – for the surgery, and for meetings with the transplant team.

Transplant team

You will meet the **transplant nurse** (or **coordinator**), who will give information and support before, during and after transplantation, and organise the timing of your child's surgery. You will also meet the **transplant surgeon**, who will lead the team that carries out your child's surgery. Your child's **paediatric nephrologist** will continue to manage your child.

Tests before the transplant

Your child will need many tests to make sure he or she is ready for a transplant. These include a series of **blood tests** as well as some **imaging tests** (scans), especially to check that his or her heart and blood vessels are healthy. Sometimes other tests are needed. These tests often start during stage 4 CKD when your child is preparing for treatment for established renal failure.

Your child will need to continue going back to the unit for further tests while he or she waits for the transplant – often up to a year or longer.

Coming to the hospital

Your child's transplant operation will be planned some time in advance. It will be scheduled to take place very soon after the kidney is removed from the living donor, usually within 2-5 hours if the donor is in the same or a nearby hospital. The donor may be at a different hospital that cares for adults.

You will be told when you need to come to the hospital. As your child will be at the hospital for some time, you should bring clothes, toiletries, toys and books. You can speak with the transplant team about any arrangements for you and your family staying at or near the hospital.

Some tests need to be done on the day of the transplantation itself. Your unit may not be able to go ahead with the operation if your child is ill – for example, with a cold or fever. Children need to start taking immunosuppressant medicines 24-48 hours before the operation, and because these make the immune system less active, your child will be less able to fight illness.

Your child cannot eat or drink anything the day of the operation.

→ [It is important that your child goes to the unit for all tests.](#)

» [More about preparing for the transplant in Kidney transplant – an introduction](#)

Further information

This is the end of the information about kidney transplant – living related donors. If you would like to read more about kidney transplant and other topics related to kidney conditions, tests and treatment, you can find a list of topics covered on the infoKID website at www.infoKID.org.uk.

Acknowledgements

This leaflet has been co-authored with Martin Christian, Consultant Paediatric Nephrologist, Nottingham Children's Hospital and Dr Stephen Marks, Chair of NHS Blood and Transplant paediatric kidney advisory subgroup.

Your notes and contact information

www.infoKID.org.uk



© BAPN and Kidney Care UK 2013-2022, all rights reserved

For details on any sources of information used in this topic, please contact us through our website www.infoKID.org.uk. We take great care to make sure that the information in this leaflet is correct and up-to-date. However, it is important that you ask the advice of your child's doctor or nurse if you are not sure about something. This information is intended for use in the United Kingdom, and may not apply to other countries.

The British Association of Paediatric Nephrology (BAPN), Kidney Care UK and the contributors and editors cannot be held responsible for the accuracy of information, omissions of information, or any actions that may be taken as a consequence of reading this information.