

Paired living kidney donation



Your **questions answered**

0300 123 23 23

www.organdonation.nhs.uk

This leaflet provides information if you are considering paired living donor transplantation. It is important that you read this leaflet together with the Human Tissue Authority leaflet *Information about living-donor transplants*, and all of the other information you receive so that you are fully informed about what is involved for the living donor and the person who receives the organ.

What is the Human Tissue Act?

The Human Tissue Act 2004 for England, Wales and Northern Ireland and the Human Tissue (Scotland) Act 2006 provide the legal framework for organ and tissue donation in the UK. The rules set out by the Human Tissue Authority (HTA) allow more flexibility in who can be a living kidney donor and who can donate to whom. This means that more people with kidney failure can benefit from a living donor transplant. One of these additional options is paired or pooled donation.

As part of the Human Tissue Act the HTA must approve all transplant operations involving living donors following an independent assessment.

What is paired donation?

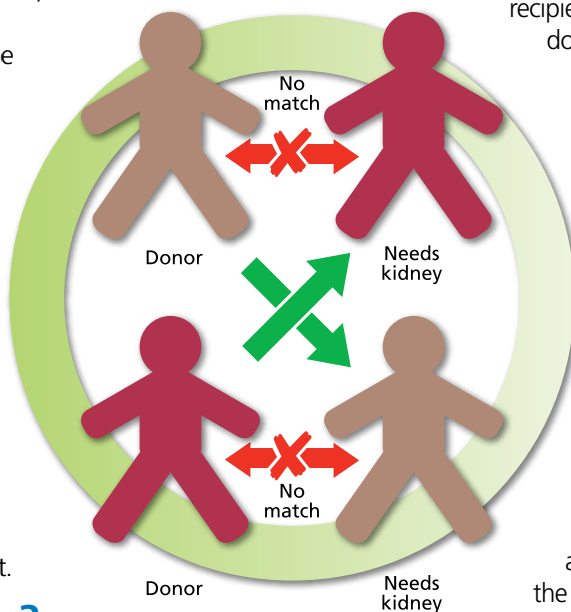
When a donor and recipient are incompatible or mismatched with each other, either by blood group or by tissue type, it may be possible for them to be matched with another donor and recipient pair in the same situation and for the kidneys to be exchanged or swapped. This is called paired donation. The benefit of this type of donation is that each recipient receives a transplant that he or she would otherwise not have

had. Paired donations have only been used for kidney transplants.

Kidney exchanges may involve more than two pairs at once. This is known as pooled donation.

How would I know if I was eligible for the scheme?

Paired donation may be one of a range of choices that you want to think about. Your local transplant centre will be able to give you more information about paired donation and discuss in detail with you if it is a good option for you. This will depend upon a number of different considerations and will be individual for everyone. There are some recipients and some recipient/donor pairs for whom paired donation may not represent a realistic option because it is unlikely that a matching pair will be identified.



What is involved in the assessment of the donor?

Potential donors are assessed in exactly the same way as all other potential living donors, according to nationally agreed guidelines, at their local kidney or transplant centre (see leaflet *'Could I be a living kidney donor?'*). The operation and the risks associated with it are the same as for any other living kidney donation. More than one donor may be registered for each recipient if there are a number of donors who are willing and suitable.

How does the process work?

Once the assessments of the recipient and donor are complete, the pair will be registered on the UK Transplant Registry. At this stage it is possible to set limits on the degree of tissue mismatch and the upper age of the potential donor that are acceptable to you.

However, it is important to be aware that very strict limits will greatly reduce the chance of a successful match and therefore you should discuss this with your transplant centre.

Recipients who are also on the national list for a deceased donor kidney will remain on that list until a suitable paired donor match is found.

At regular intervals, NHS Blood and Transplant (NHSBT) performs a 'matching run' to identify possible transplant matches. Each 'matching run' is performed by a unique computer program, which is based upon agreed criteria to achieve the best number and combination of matches.

A match will not be found for every pair each time but, depending on the size of the list, up to 40% of pairs could be matched per run. A pair may remain on the list as long as they wish, but a long wait does not guarantee that a match will be found.

What happens once **pairs have been matched?**

When suitable pairs are matched, NHSBT will notify the transplant centres and compatibility between the pairs will then need to be confirmed by tissue-type crossmatching, ideally within two weeks of the 'matching run'.

Once compatibility has been confirmed, the recipients' names are temporarily removed from the national transplant list for deceased donor kidneys, pending the paired donor transplant.

Before the transplant operations can be performed, the transplant must be approved by the HTA. In order to achieve this, all donors and recipients need to see a local Independent Assessor (trained and accredited by the Human Tissue Authority) who can recommend to the HTA that the transplant operation should be approved. If all of the legal requirements under the Human Tissue Act have been met, final approval can be given by the Human Tissue Authority.

It is expected that the transplants could take place approximately six weeks after the 'matching run', although this will depend on a number of factors, as the date must be convenient to both pairs.

The transplants are planned between the transplant centres so that the operations are performed at exactly the same time on the same day. Donors and recipients will usually have their operations in their local transplant centre and special arrangements will be made to transport the donated kidneys quickly and safely between the two centres. It may be possible to make alternative arrangements (for example, the donor could travel to the other transplant centre to have their operation), if all parties are in agreement and the arrangements can be accommodated by the two transplant centres.

The donor and recipient pairs should remain anonymous until the operation. After the transplant it may be possible for donor-recipient pairs to meet or make contact with each other, if all parties are in agreement. This would be facilitated through your transplant coordinator.

How would I know that **I would get a good kidney?**

All donors are assessed according to national guidelines and can only be registered if all test results are satisfactory. All the relevant and important details about the donor kidney will be given to your doctor and you will be able to discuss with them any concerns you may have.

What are the **benefits of the scheme?**

The major benefit of the scheme is that it offers each recipient the advantage of a living donor kidney transplant despite the incompatibility between the donor and his/her intended recipient. The difference

is that the recipient receives a kidney from someone they do not know rather than from a donor who is well known to them. Likewise, the donor donates to a recipient who is unknown to him/her.

Are there any **drawbacks of the scheme?**

Many pairs are not matched when a matching run is performed. This means that it is not possible to predict how long a patient may have to wait before a suitable match is identified.

Once pairs have been matched, compatibility confirmed and HTA approval obtained, the surgery can then be planned for both donor-recipient pairs. Whilst every precaution is taken, there is a small risk that an operation may not go according to plan, leaving a recipient without a successful transplant. It is very unusual that a kidney donated from a living donor cannot be transplanted into the intended recipient but it is important that this is taken into consideration by all donors and recipients in the paired donor situation.

For **further information**

Could I be a living kidney donor? NHS Blood and Transplant, October 2004, updated June 2006. Available from Donor Line on 0300 123 23 23 or www.organdonation.nhs.uk

Information about living donor transplants, Human Tissue Authority, updated October 2007. Available from your local Transplant Unit or www.hta.gov.uk

UK Guidelines for Living Donor Kidney Transplantation, British Transplantation Society/Renal Association, 2nd edition, April 2005. Available from www.bts.org.uk