Oxford Kidney Unit

Treatment options for chronic kidney disease

A brief overview
You may feel well at the moment and may not have any symptoms from your kidney disease, but it is important that you understand your treatment options. We would like to make sure you are involved in the decisions about your care and have enough time to plan and prepare for your treatment. You may want to involve family members or friends in these decisions.

This leaflet has been written to give you information about these options.

Why have I been referred to a Renal Specialist Nurse Practitioner?

The Oxford Kidney Unit has Renal Specialist Nurse Practitioners, who work with your Renal Team, GP’s services, local Renal Unit, as well as you and your family or carers, to help manage your kidney disease.

You will have been referred to the Renal Specialist Nurse Practitioners because your kidney function is at about 20% (eGFR) and still falling (Stage 5 chronic kidney disease). You will probably need treatment within the next year.
What do the kidneys do?

Kidneys help to control many of your bodily functions. As your kidney function falls, you may develop some or all of these problems:

- difficulty in removing waste products and water from your body
- problems making new red blood cells, leading to anaemia (low haemoglobin levels)
- difficulty in controlling your blood pressure
- difficulty maintaining healthy bones.

As your kidney function falls, you may begin to experience some symptoms. These are usually due to the build-up of waste products in your blood, as your kidneys are not able to filter or ‘clean up’ efficiently. Some of the symptoms can also be due to anaemia.

**You may experience some of the following symptoms:**

- tiredness
- trouble concentrating
- not feeling hungry and losing weight
- feeling sick or being sick
- itchy skin
- lack of ability or interest in sex
- trouble sleeping
- shortness of breath
- high blood pressure
- swollen ankles
- puffiness around the eyes.
Treatments for chronic kidney disease

When you have Stage 5 chronic kidney disease, you will soon need treatment to support your kidney function. This may be haemodialysis, peritoneal dialysis, or a kidney transplant. Most people will need to have haemodialysis or peritoneal dialysis before a kidney transplant.

Dialysis will not cure your kidney disease, but will support you enough to keep you alive.

You may choose not to have dialysis, but to have ‘conservative kidney management’. We will give you more information, if this is what you choose.

It may be that only one type of treatment is suitable for you. Your Renal Team will explain the reason why to you.

Dialysis – what are the options?

**Peritoneal dialysis (PD)**

Peritoneal dialysis uses the inside lining of your abdomen (the peritoneum) to filter waste products and water from your bloodstream. Like the kidneys, the peritoneum contains thousands of tiny blood vessels. It acts like a filter, so that waste products and excess fluid are removed from your body.

To do the treatment you will need a small operation to insert a thin tube, called a catheter, into the space inside your abdomen (the peritoneal cavity).
This will stay inside your abdomen all the time you are on PD.
The catheter is usually inserted two weeks or more before you need to start dialysis, but you may be able to start dialysis within hours of the catheter being fitted.

To do PD, you attach a bag of dialysis fluid to the end of your catheter. The fluid drains into your peritoneal cavity and you can then disconnect the bag. Waste products and excess water will filter slowly into the dialysis fluid.

After a few hours you can attach an empty bag to the catheter, to drain the fluid and waste out. You will then need to put in fresh fluid.

Draining the used fluid out and putting the new dialysis fluid in usually takes about 30-40 minutes. We call this a ‘PD exchange’.

You will need to repeat this about four times a day (continuous ambulatory peritoneal dialysis – CAPD).

The exchanges can also be done by a machine overnight while you sleep (automated peritoneal dialysis – APD).

PD takes place in your home. If you choose this type of dialysis, a team of nurses will teach you how to carry out the procedure. A dialysis company will supply you with everything you need to do your dialysis. PD allows you to be more flexible with your time, as you are in control of your dialysis.
Haemodialysis (HD)

Haemodialysis uses a dialysis machine to clean your blood. Blood is taken from your body, through a tube from a vein in your arm (or neck). The dialysis machine removes excess waste products and water through a special filter (dialyser). Your cleaned blood is then returned to you through another tube into your vein.

This is usually a four hour treatment, three times a week. You can have it at the hospital, or can be taught to do it in your own home.

Arteriovenous fistula

The ideal way to access to your blood for haemodialysis is to have an arteriovenous fistula made. This involves a small operation where your artery is joined to your vein. This makes the vein become stronger and bigger, so that the dialysis nurse can insert two needles into it. One needle takes the blood out to be cleaned and the other needle returns the cleaned blood to your body.
A fistula takes at least 6 weeks to develop (mature). Ideally we will make your fistula 6 months before we think you will need to start dialysis.

**Tesio line**

If there is not enough time for a fistula to develop, you may need to start dialysis via two small tubes which are inserted into a large vein in your neck (a Tesio line).
# The differences between peritoneal dialysis and haemodialysis

<table>
<thead>
<tr>
<th>Peritoneal dialysis</th>
<th>Haemodialysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Can be done at home.</td>
<td>• Can be done at home (after completing training) or in the hospital.</td>
</tr>
<tr>
<td>• You are more in control of your treatment.</td>
<td>• Travel to and from the hospital, plus waiting to start dialysis, can take up quite a bit of your own time, but you do get to meet other people also having treatment.</td>
</tr>
<tr>
<td>• No wasted time travelling to the hospital.</td>
<td>• Sometimes it is difficult to make and maintain fistulas.</td>
</tr>
<tr>
<td>• Gentle removal of waste products and fluid.</td>
<td>• If you want to travel, you will need to organise your dialysis in another unit.</td>
</tr>
<tr>
<td>• You can go on holiday. Fluid is delivered to your holiday destination free of charge.</td>
<td>• Your diet and fluid allowance is more restricted.</td>
</tr>
<tr>
<td>• Your fluid and food allowance is more flexible.</td>
<td>• If you work, you may need to dialyse in the evening or do home dialysis.</td>
</tr>
<tr>
<td>• Can be done around work.</td>
<td>• Nurse and technical support always available for dialysis in hospital and at home.</td>
</tr>
<tr>
<td>• Nurse and technical support always available.</td>
<td>• You may feel very tired after treatment, and may take a day to recover.</td>
</tr>
<tr>
<td>• Risk of PD infection.</td>
<td>• Risk of blood infection.</td>
</tr>
</tbody>
</table>

There can be problems with both haemodialysis and peritoneal dialysis. Your kidney doctor or nurse will talk with you about these.
Conservative kidney management

Dialysis is not for everyone and can be hard work. You may choose not to have dialysis. This is called conservative kidney management.

Your kidney doctor or nurse can explain and discuss this option with you.

Kidney transplant

If you have other severe medical conditions it may not be possible for you to have a kidney transplant. Your kidney doctor will discuss whether a kidney transplant would be a good treatment for you.
What can I do to help my kidney function?

You may be able to reduce the damage to your kidneys by making some changes to your lifestyle:

- If you smoke, stop.
- Make sure you have a healthy blood pressure and blood cholesterol, with regular tests.
- Avoid taking non-steroidal anti-inflammatory drugs (NSAIDs), such as ibuprofen/diclofenac (including creams and gels).
- Maintain a healthy weight and eat a healthy diet, including plenty of fresh fruit, vegetables, salads and fish, unless advised otherwise by the dietitian
- Use less salt in cooking and at the table and avoid salty, processed foods.
- Keep active and maybe increase your activity.
- Drink alcohol in moderation: 14 units per week or less (or in line with Government guidelines).
- Have the flu jab every year and the pneumococcus vaccine every 5 years.
- If you are diabetic, make sure your blood glucose is well controlled.

The Renal Specialist Nurse Practitioners will see you in clinic. You can contact them if you have any queries or concerns. They will try to see you in the same clinic where the dietitian and kidney doctor are available. These are called Low Clearance Clinics.
Where can I get more information?

We have more information leaflets about kidney conditions, treatments and dialysis options available for you to read. These are available from your Pre-dialysis Nurse or from the Oxford Kidney Unit website:
Website: [www.ouh.nhs.uk/OKU](http://www.ouh.nhs.uk/OKU)

Further information

**NHS Choices**
Website: [www.nhs.uk/conditions/dialysis/Pages/Introduction](http://www.nhs.uk/conditions/dialysis/Pages/Introduction)

**Six Counties Kidney Patients Association (SCKPA)**
Local charity, run by and for kidney patients.
Website: [www.sixcountieskpa.org.uk](http://www.sixcountieskpa.org.uk)

**National Kidney Foundation**
National charity, run by and for kidney patients.
Website: [www.kidney.org.uk](http://www.kidney.org.uk)

**Kidney Care UK**
Kidney patient support charity.
Website: [www.kidneycareuk.org](http://www.kidneycareuk.org)

**100,000 Genomes Project**
World class research is carried out at Oxford University Hospitals. We are also a Genomics Medicine Centre and you may be eligible to take part in the 100,000 Genomes project. During your visit you may be approached about clinical research studies and the Genomes project. If you would like further information, please ask your healthcare professional or visit the website: [www.ouh.nhs.uk/research/projects(genomes.aspx)](http://www.ouh.nhs.uk/research/projects(genomes.aspx)
If you have a specific requirement, need an interpreter, a document in Easy Read, another language, large print, Braille or audio version, please call 01865 221 473 or email PALS@ouh.nhs.uk

Author: Margaret Townsend, Pre-dialysis Specialist Nurse
April 2018
Review: April 2021
Oxford University Hospitals NHS Foundation Trust
Oxford OX3 9DU
www.ouh.nhs.uk/information