Your blood pressure and dialysis
Information for patients
If you are on dialysis, this leaflet will provide you with information on how manage your blood pressure.

**What is blood pressure?**

Blood pressure is a measurement of the force of blood against your artery walls. Your blood pressure is measured using two numbers. The first number, the systolic, is measured when your heart beats and pumps blood around your body. The second number, the diastolic, is measured when your heart is at rest.

Blood pressure is measured in millimetres of mercury (mmHg). If your blood pressure reading is 125/65mmHg, this will be read as ‘125 over 65’. Normal blood pressure is around 130/80mmHg.

**Why is it important to measure blood pressure?**

People on dialysis are more likely to develop high blood pressure, which is also known as hypertension. High blood pressure may cause an increased risk of a heart attack, heart failure, heart valve disease, strokes and poor blood supply to the legs. Keeping your blood pressure in the normal range will help reduce your risk of developing these conditions.

Some people on dialysis may also experience low blood pressure, which is known as hypotension.
Why might I experience high blood pressure?

Fluid balance and blood pressure go together. When you have too much fluid in your body, water is pushed from your blood system into your surrounding tissues. This is more likely to happen in people with chronic kidney disease, especially in people on dialysis who pass a reduced amount of urine.

Excess fluid can cause high blood pressure, as well as swelling in your ankles and legs (known as oedema). Sometimes fluid can go back into your lungs (pulmonary oedema) and you may experience problems with your breathing.

Dialysis is the only way to remove the excess fluid. Your blood pressure will change during your dialysis session and usually will be lower than when you started dialysis. Your blood pressure is measured before, during and after haemodialysis.

Getting the balance right between passing urine and drinking is really important and your dialysis nurse will talk to you about this. There is also a leaflet available ‘Your fluid balance when on haemodialysis’. Please ask your nurse for a copy.

Why might I experience low blood pressure?

When your fluid intake between dialysis sessions is too high we have to remove the extra fluid at a faster rate. This may cause your blood pressure to drop and make you feel dizzy, sick and get muscle cramps. It is important to monitor and reduce the fluid you have between your dialysis sessions, to try to prevent low blood pressure.

If you have low pressure before you start dialysis, your dialysis nurse will explain why this may be happening and what they can do to help you while you are on dialysis.
Will I need to take blood pressure medication?

Most people on dialysis will need blood pressure tablets to help keep it at a normal level. You normally take these on the days when you do not have dialysis. Please ask your nurse if you are not sure which tablets you are supposed to be taking.

Blood pressure tablets work in different ways and you may need to try different tablets to see what suits you best. Your kidney doctor will talk to you about these.

What is your dry weight?

Dry weight is your ideal weight after dialysis. It is the weight at which we aim for there to be no excess fluid in your body. Blood pressure measurements taken after dialysis are a good indicator of whether we are removing enough fluid and whether your dry weight target is correct.

Reducing your dry weight to improve your blood pressure

High blood pressure is usually caused by too much fluid in the body. Reducing your dry weight can help you to have a good blood pressure. Some people will be able to reduce or stop their blood pressure medications and may have a normal blood pressure when they reach their true dry weight.
What will happen during the dialysis session?

When you come for dialysis we calculate the amount of fluid that needs to be removed. This will be the difference between your weight before dialysis and your target dry weight. 1kg of weight on the scales is the same as 1 litre of fluid in your body.

Your nurse will aim to remove this calculated amount of fluid during your dialysis. They will also ask you how you are feeling, whether you have any ankle swelling or shortness of breath, and will measure your blood pressure.

Your dry weight may need to be altered if you have lost or gained weight that isn’t due to excess fluid. If your blood pressure remains high (such as 140/90 after dialysis) on several occasions, your dialysis nurse or doctor may reduce your dry weight.

Changes to your dry weight will be discussed with you to make sure your haemodialysis experience is as comfortable as possible and that your blood pressure is well managed. Should you have any questions about your dry weight or your blood pressure management, please speak to your dialysis nurse.
### What can I do to improve my blood pressure if it is high?

- Stick to your fluid allowance (how much you can drink in 24 hours).
- Reduce salt intake in your diet.
- Exercise within your capability. Any form of physical exercise that you are able to undertake is likely to benefit your overall health and potentially your blood pressure as well.
- If you are diabetic, keep your blood glucose under control.
- Take your medication as it has been prescribed.

### What can I do to improve my blood pressure if it is low?

- Stand up gradually and avoid standing for long periods of time.
- Make sure you drink your fluid allowance and are not below your dry weight.
- Wear support stockings, if recommended.
- Eat smaller meals more often.
Where can I get more information?

Oxford Kidney Unit
This website had lots more information for patients, family members and carers.
Website: www.ouh.nhs.uk/oku/

Kidney Research UK Health
This website will give you information on managing your blood pressure and chronic kidney disease.
Website: www.kidneyresearchuk.org/health-information/blood-pressure-and-kidney-disease

BloodPressureUK.org
This website has lots of information and tips on blood pressure management.
Website: www.bloodpressureuk.org/BloodPressureandyou/Thebasics

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
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

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