Firsway Health Centre

Chronic Kidney Disease

Chronic kidney disease (CKD) is a long-term condition where the kidneys don't work as well as they should.

It's a common condition often associated with getting older. Anyone can get it, although it's more common in people from black and south Asian communities. Most people with kidney disease live long, largely normal lives, CKD can get gradually worse over time and eventually the kidneys may stop working altogether, but this is uncommon.

The term chronic is often used informally, to mean very poor. In medical terms, chronic simply means an ongoing long-term condition and does not reflect the severity or seriousness of a condition. The severity of chronic kidney disease is expressed in 5 stages, in the community most people are diagnosed with CKD when they have CKD Stage 3, the early stages of CKD. Stage 3 may not seem to be an early stage considering there are only 5 Stages but CKD Stages 1 and 2 are only diagnosed if there are other conditions or tests which have found kidney damage, often these are conditions originating from within the kidneys themselves.

Causes of CKD

Kidney disease is usually caused by other conditions that put a strain on the kidneys. Often, it's the result of a combination of different problems.
CKD can be caused by:

- high blood pressure – over time, this can put strain on the small blood vessels in the kidneys and stop the kidneys working properly
- diabetes – too much glucose in your blood can damage the tiny filters in the kidneys
- high cholesterol – this can cause a build-up of fatty deposits in the blood vessels supplying your kidneys, which can make it harder for them to work properly
- kidney infections
- glomerulonephritis – kidney inflammation
- blockages in the flow of urine – for example, from recurrent kidney stones or an enlarged prostate
- long-term, regular use of certain medicines – such as lithium and non-steroidal anti-inflammatory drugs (NSAIDs) for example Naproxen and Ibuprofen.

You can help prevent CKD by making healthy lifestyle changes and ensuring any underlying conditions you have are well controlled.

Tests for CKD

CKD can be diagnosed using blood and urine tests. These tests are used to look for high levels of certain substances in your blood and urine that are signs your kidneys aren't working properly. If you're at a

high risk of developing kidney disease – for example, you have one of the conditions mentioned above – you may be advised to have regular tests to check for CKD so it's picked up at an early stage.

The results of your blood and urine tests can be used to tell the stage of your kidney disease. This is a number that reflects how severe the damage to your kidneys is, the higher the stage the more severe the condition is.

Test results and stages of CKD

Your test results can be used to determine how damaged your kidneys are, known as the stage of CKD. This can help your health care team decide the best treatment for you and determine how often you should have tests to monitor your condition.

The eGFR or estimated glomerular filtration rate is a calculation made when you have a blood test to check on your kidneys, it gives an estimate of how well the kidneys are performing.

Your eGFR result is given as a stage from one to five:

- **stage 1 (G1)** – a normal eGFR (above 90ml/min), but other tests have detected signs of kidney damage
- **stage 2 (G2)** – a slightly reduced eGFR (60-89ml/min), with other signs of kidney damage
- **stage 3a (G3a)** – an eGFR of 45-59ml/min
- **stage 3b (G3b)** – an eGFR of 30-44ml/min
- **stage 4 (G4)** – an eGFR of 15-29ml/min
- **stage 5 (G5)** – an eGFR below 15ml/min, meaning the kidneys have lost almost all of their function

Your Urine sample is tested for the Albumin:Creatinine Ratio (ACR). Albumin is a small protein found in the blood, if the kidneys are functioning well, this protein does not usually appear in the urine in significant amounts. In CKD, the kidneys can become 'leaky' and let this protein through into the urine. The ACR result is given as a stage from one to three:

- **A1** – an ACR of less than 3mg/mmol
- **A2** – an ACR of 3-30mg/mmol
- **A3** – an ACR of more than 30mg/mmol

For both eGFR and ACR, a higher stage indicates more significant kidney disease.

Treatments for CKD

There's no cure for CKD, but treatment can help relieve the symptoms and stop it getting worse. Your treatment will depend on how severe your kidney disease is. The main treatments in the early stages are:

- lifestyle changes to ensure you remain as healthy as possible
- medication to control associated problems such as high blood pressure and high cholesterol

You'll also be advised to have regular check-ups to monitor your condition.

Outlook for CKD

CKD can range from a mild condition with no symptoms, to a very serious condition where the kidneys stop working, sometimes called kidney failure.

Most people with CKD will be able to control their condition with medication and regular check-ups. CKD only progresses to kidney failure in around 1 in 50 people with the condition.

But if you have CKD, even if it's mild, you're at an increased risk of developing other problems, such as cardiovascular disease. This is a group of conditions affecting the heart and blood vessels, which includes heart attacks and strokes.

Cardiovascular disease is one of the main causes of death in people with kidney disease, although healthy lifestyle changes and medication can help reduce your risk of developing it.

Looking After Your Kidneys

Take your medication

It's very important that you take any prescribed medication, even if you don't feel unwell. Some medicines are designed to prevent serious problems occurring in the future. It's also useful to read the information leaflet that comes with the medication about possible interactions with other medicines or supplements.

Check with your care team if you plan to take any over-the-counter remedies, such as painkillers or nutritional supplements. These can sometimes affect your kidneys or interfere with your medication. Also, speak to your care team if you have any concerns about the medication you are taking, or if you're experiencing any side effects.

Have a healthy diet

A healthy, balanced diet can help improve your general health and reduce your risk of developing further problems.

A balanced diet should include:

- plenty of fruit and vegetables – aim for at least five portions a day
- meals based on starchy foods, such as potatoes, bread, rice or pasta
- some dairy or dairy alternatives
- some beans or pulses, fish, eggs, meat and other sources of protein
- low levels of saturated fat, salt and sugar

Exercise regularly

Regular physical activity can also help improve your general health. Don't be scared to exercise. Exercise is good for anyone with kidney disease, however severe. Not only will it boost your energy, help you sleep, strengthen your bones, ward off depression and keep you fit, it may also reduce your risk of problems such as heart disease.
If you have mild to moderate kidney disease, your ability to exercise shouldn't be reduced. You should be able to exercise as often and as vigorously as someone the same age as you with healthy kidneys.

If your condition is more advanced, your ability to exercise is likely to be reduced, and you may become breathless and tired more quickly.

But don't be deterred – exercise is still beneficial. Make sure you start slowly and build up gradually. Check with your doctor before beginning a new exercise programme.

Stop smoking

If you smoke, stopping smoking can improve your overall health and reduce your risk of many other health problems. Speak to your NHS stop smoking service if you think you'll need help quitting. They can provide support and, if necessary, prescribe stop smoking treatments.

Limit your alcohol consumption

You may still be able to drink alcohol if you have kidney disease, but it's advisable not to exceed the recommended limits of more than 14 alcohol units a week.

Speak to your GP or care team if you find it difficult to cut down the amount of alcohol you drink.

Get vaccinated

Kidney disease can put a significant strain on your body and make you more vulnerable to infections. Everyone with the condition is encouraged to have the annual flu jab and the one-off pneumococcal vaccination. You can get these vaccinations at Firsway.

Travel

Mild chronic kidney disease is unlikely to cause any problems. The NHS will look after you if you get ill while on holiday in the UK. If you're in Europe, the European Health Insurance Card (EHIC) entitles you to free or reduced-cost hospital treatment which you can apply for before travel, though this may change when the UK leaves the European Union.

It's a good idea to take out holiday health insurance in addition to carrying the EHIC. Anyone with kidney disease should declare it as a pre-existing medical condition on standard insurance application forms. It may exclude you from some policies.

Reference

The information in this leaflet was taken and adapted from The NHS Choices Website on Chronic Kidney Disease on the 13/01/17. For more information go to http://www.nhs.uk/Conditions/Kidney-disease-chronic