

Renal Unit

Patient Information



Information

If you need this information in large print, easy read, on audiotape or in another language please call 0800 7838058 or e-mail pals@dchft.nhs.uk

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Chronic Kidney Disease

Introduction

This leaflet is for people who have Chronic Kidney Disease. It is also intended for people with high blood pressure or diabetes as these conditions sometimes affect the Kidneys.

It explains the tests which show how well your kidneys are working and what can be done to help prevent further problems.

Where are my kidneys?

Most people have two Kidneys, one on each side of the spine, at the back of the waist. Each Kidney is about the size of a clenched fist.

What do my Kidneys do?

Healthy Kidneys do a number of important things. They remove waste and toxins from the body by filtering the blood. By varying the amount of urine passed (depending on how much we drink) the Kidneys make sure the body retains or gets rid of the right amount of water.

Who is more likely to get Kidney Disease?

Anyone can develop Chronic Kidney Disease, but it is more common with increasing age and in people of south Asian or African Caribbean origin. This is because they are more likely to get High Blood Pressure and Diabetes.

What causes Kidney Problems?

The most common causes of Kidney problems are:

- High Blood pressure and diabetes. It usually takes many years of experiencing these conditions before the Kidneys become affected. It is more common if the blood pressure or the diabetes has not been well controlled
- Inflammation (glomerulonephritis) or infection of the Kidney (pyelonephritis)
- Inherited Kidney problems, for example polycystic kidney disease. Kidney problems can also be the result of a blockage such as an enlarged prostate or kidney stones

- Some tablets can cause Kidney damage if taken regularly over a long period of time. For example some pain killers such as ibuprofen, diclofenac and naproxen.
- Sometimes it is not possible to say what has caused the Kidney problem and is therefore referred to as “not known”

Are my Kidney Problems Curable?

Some kidney problems can be treated so that the kidneys improve. Some problems are not curable, the earlier the Kidney problem is found, the better the opportunity to slow or stop any further damage occurring. Most importantly your involvement with the Kidney Care Team can help, advise and support you to help preserve your Kidney Function.

What are the tests for Kidney Disease?

Both blood and urine tests are used to diagnose and monitor Kidney Disease. Sometimes scans and X-ray tests help the diagnosis. A kidney biopsy is sometimes necessary to determine the cause of kidney disease.

Urine Tests

A fresh sample of urine can be tested by the laboratory to show if it contains protein (called proteinuria or microalbuminuria). This is best done on the first urine that you pass in the morning. Some urine tests (such as the test for blood in the urine) can be taken by a nurse without being sent to the laboratory. Either protein or blood in the urine might indicate kidney problems.

Blood Tests

The main way to check how well your kidneys are working is through a blood test. The test measures a substance called creatinine. This is used to calculate **estimated glomerular filtration rate**, (eGFR). The estimated glomerular filtration is an estimate of how well the kidneys are working. A result of 60-90ml/min is normal. Some people call this a percentage but 60 or greater is normal. Look at the chart below to give you an idea of the different stages of kidney damage.

What do my results mean?

There are 5 stages of Kidney Disease:

		eGFR
Stage 1	The eGFR shows normal kidney function though there is some damage ie protein or blood in your urine	Greater than 90ml/min
Stage 2	The kidneys are working normally but there is evidence of damage to the kidneys eg blood or protein in the urine or an abnormal scan	60-90ml/min
Stage 3a	Moderately reduced kidney function, CKD 3a is considered normal in those over 70 years of age	45-59ml/min

Stage 3b	Moderate decrease in eGFR needing regular checking	30-44ml/min
Stage 4	Severely reduced kidney function requiring regular monitoring for complications of kidney disease	15-29ml/min
Stage 5	Very severely reduced kidney function	Less than 15ml/min

AKI – Having chronic kidney disease increases the risk that the kidneys can be injured. If you know you have chronic kidney disease and are due to have any of the procedures below you should speak to the person organising the procedure if there is anything that can be done to reduce the risk of acute kidney injury.

- Surgery
- CT scan that requires an injection of contrast
- Coronary angiogram
- Angiogram for peripheral vascular disease
- Colonoscopy

Also, if you become unwell with a bad chest infection/pneumonia or experience an episode of diarrhoea or vomiting then some medicines should be stopped until you have fully recovered. Once fully recovered the medicines can be restarted. These drugs include

- ACE inhibitors – Ramipril, Lisinopril, Enalapril
- ARBs – Losartan, Candesartan, Telmisartan, Valsartan, Olmesartan
- Diuretics – Spironolactone

If you are unwell with one of these conditions then it is prudent to have your bloods checked after a couple of days to make sure that your kidneys have not got worse.

What can be done to prevent Kidney Function Declining?

After the age of 30 everyone’s kidneys get worse slowly with age. There are several things that you can do to help slow down the speed at which your kidneys get worse.

Blood Pressure

Blood pressure is particularly important for people with kidney problems. High blood pressure make the heart work harder, speeds up damage to the kidneys and increases the risk of stroke. It pays to keep the blood pressure well controlled.

Have your blood pressure checked regularly and note down your numbers. Most people with Kidney damage should have a blood pressure below 140 (top number) and below 90 (bottom number). If you have Kidney Damage and diabetes, the numbers should be below 130 (top number) and below 80 (bottom number).

Your blood pressure will need to be monitored regularly and you must ensure that you take your blood pressure tablets as prescribed. It usually requires a combination of tablets to control blood pressure in people with kidney disease.

Your blood pressure can be improved by reducing salt intake, losing weight if you are overweight, exercising regularly, stopping smoking and avoiding heavy alcohol intake.

Diabetes

If you have diabetes it is important that you keep your blood sugars under control. Keep your appointments with the GP or hospital. You may also be prone to high blood pressure. Therefore it is vital that you take your medication as prescribed.

It is important to continue with all of your diabetes care, including retinal screening and foot clinics as well as kidney appointments.

Eating Well

If the Dietitian has advised you on a specific diet, you must adhere to this advice. If you are unsure you can contact your dietitian on the phone number on the last page. However it is important that you try to eat a healthy well-balanced diet.

Tips for eating well are:

- Enjoy your food
- Eat regular meals – do not skip breakfast
- Eat to be a healthy weight
- Eat fruit and vegetables every day
- (5 a day if possible)
- Base your meals around starchy foods
- (bread, cereals and potatoes)
- Eat less salt

Key messages:

- You do not normally need to have a special diet for stage 3a or 3b kidney damage, unless you have another condition such as diabetes
- A low salt-diet is recommended. A high salt intake is linked with high blood pressure and heart disease. To reduce the amount of salt you eat, try these suggestions.
 1. Do not add salt to your food at the table
 2. Try to cook without salt. There are lots of ways to add flavour to your cooking without using salt. Such as adding dried herbs to pasta, meat, fish and vegetable dishes or you could marinate your meat and fish in advance to give them more flavour
 3. Cut down on manufactured and processed foods. Try using fresh or frozen meat, fish and vegetables rather than pre-prepared dishes or ready meals
 4. If buying tinned vegetables, choose those labelled 'no added salt' or reduced 'salt'
 5. Do not use salt substitutes e.g. 'lo-salt' as these products are not suitable for people with kidney problems
- Drink alcohol only in moderation 3-4 units a day for men and 2-3 units a day for women and older adults is recommended. One unit is the same as half pint of beer or lager, 1 small glass of wine or 1 pub measure of spirits

Keeping Fit

- There are no special exercises for people with Kidney problems - all adults should try to be active every day. Some activity however light, is better for your health than none at all. However, many daily activities such as housework are not sufficient on their own because the work isn't hard enough to increase your heart rate
- To stay healthy or to improve health, all adults need two types of regular physical activity. Try to be as active as you can

Smoking

Smoking is thought to have a number of effects on the Kidneys, particularly by raising blood pressure. This is known to increase your risk of cardiovascular disease, partly through the hardening and narrowing of your arteries, including those arteries in the Kidneys, therefore making any Kidney damage worse.

If you stop smoking:

- After 20 minutes your blood pressure and pulse will return to normal
- After 8 hours nicotine and carbon monoxide levels in your blood are halved
- After 72 hours your breathing becomes easier and your energy levels increase
- After 2 to 12 weeks your circulation improves and exercise can be easier
- After 3 to 9 months any coughs, wheezing and breathing problems improve
- After 5 years the risk of heart attack is halved
- After 10 years the risk of lung cancer is halved and the risk of heart attack is at the same level as non-smokers

If you would like advice and support on giving up smoking, please contact Smoke stop, number listed at the end of the leaflet.

Acute Kidney Injury

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The Kidney Care Team

The Kidney Care Team comprises a team of experienced renal nurses, who are available for advice and support.

If you feel unwell between Renal appointments, Please contact your General Practitioner (GP).

Social Work Support

The Renal Social Work Team is available to provide advice and support to patients and carers. We can see you either in hospital, at home or offer telephone advice depending on your need. We can arrange appropriate care services if required and offer advice on employment, benefits and housing. We can also assist in making applications to charities for grants if necessary.

If you feel you would like to speak to one of our team of social workers, please contact them on the number below.

Psychological Support Service

The Psychological Support Team is available for counselling or psychological assessment and therapy, and is led by our clinical psychologist. If you would like some emotional support, please speak to a member of the renal team and request a referral. There is also a support group on Facebook at www.facebook.com/KidneyBuddies

Dietitians

You may be referred to the dietitians by the Kidney Doctors when you are at clinic. If you would like to speak to a Dietitian please contact them on the number below.

Patient View

Patient view is a system which allows patients to view their own blood results. Anyone with access to the internet either at home or in a library can view their results and learn more about their kidney disease. If you are interested in being able to see your blood results please speak to one of the Kidney Care Team so that you can be signed up for this service.

Useful contacts

West Dorset Kidney Care Team	01305 255349
East Dorset Kidney Care Team	01202 307433

Transplant Team	01305 254546
Social Work Support	01305 255217
Psychological Support Team	01305 254653
Dietitians	01305 255377
Renal secretaries	01305 255269
Appointment enquiries	01305 254892
Smoke stop	0800 00 76653

Useful websites

www.kidneyresearchuk.org

www.nhs.uk

www.patient.co.uk/health/chronic-kidney-disease

www.patientview.org

www.kidney.org.uk

www.dorsetkidneyfund.org.uk

www.edren.org