What can be done about Chronic Kidney Disease (CKD)?

First steps

When tests first show signs of CKD your doctor may need you to attend for further checks to confirm the findings and to look for the cause. Sometimes an ultrasound scan of the kidneys is needed. A few patients will need to see a hospital specialist depending on the results of all the tests and if there are particular problems such as difficulty in controlling blood pressure or if the kidney tests are getting worse.

Routine checks

It will be important for you to have regular checks of blood pressure, blood and urine tests with your doctor or nurse. How often will depend on the CKD stage, whether the GFR test is changing and if there are problems with blood pressure or diabetes. Really careful blood pressure control is very important in CKD. Generally speaking blood pressure should be no more than 130/80 (even lower - 125/75 - in some kidney conditions).

NB For many people tablets known as ACE Inhibitors or Angiotensin Receptor Blockers are the best treatment for blood pressure but very occasionally they can affect the kidney and have to be stopped. If you do need them, your doctor should check your GFR first and repeat the test after 2 weeks and after any increase in dose to be on the safe side.

What can I do to help myself?

- take regular exercise
- keep weight down
- don't smoke
- avoid excess salt and alcohol

And with your doctor's help

- careful blood pressure control
- careful diabetes control
- check cholesterol

Remember – all this is designed to protect the heart and circulation as well as the kidneys.

When is dialysis or a transplant needed?

This only happens to a small minority of people with CKD. Part of the routine steps in stage 4 or 5 is for your doctor to discuss your tests with your local kidney specialist. If it seems likely that you will need dialysis the different types of treatment will be explained in detail – but even at this stage the kidneys don't always carry on getting worse.

What are the symptoms of CKD?

In most people the early stages of CKD do not cause any symptoms. Sometimes there are none at all until a few weeks before dialysis. Symptoms that can occur in later stages are:

- feeling tired • difficulty concentrating • itchy skin
- swollen ankles • breathlessness on exertion
- poor appetite and weight loss • feeling sick

Of course these can be caused by something else but they may mean that an extra check-up is needed.

Other sources of information

Renal Association: **www.renal.org.uk**
British Heart Foundation: **www.bhf.org.uk**
Diabetes UK: **www.diabetes.org.uk**

National Kidney Federation:
http://www.kidney.org.uk/Medical-Info/ckd-info/index.html

This leaflet has been prepared by: Natasha McIntyre (consultant nurse), Dr Richard Burden and Dr Donal O'Donoghue (consultant physicians) and Dr Steve Blades (general practitioner) on behalf of the Royal College of General Practitioners.

If you would like further copies of this leaflet please contact the ARI Secretariat at Email: **info@ari-uk.net** Web: **www.ari-uk.net**

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Chronic Kidney Disease:

What it is - what it means

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 kidneys.

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

Chronic Kidney Disease (CKD) rarely means dialysis

When people think of kidney disease they usually think of dialysis or kidney transplants but there is much more to it than that. Chronic Kidney Disease (CKD) is really quite common and affects as many as 1 in 10 of the general population. Remember that the words 'chronic disease' as a medical term mean any long-lasting condition and not an illness that it is bound to be very serious or immediately life-threatening. Only a very small minority of people with CKD end up needing dialysis or a transplant.

What are the tests for Kidney Disease?

Both blood and urine tests are used to diagnose kidney disease. A blood test called GFR (Glomerular Filtration Rate) tells us roughly how well the kidneys are working as a % of normal. Simple urine tests sometimes show protein or blood cells. This often means an infection but it can be a sign of early kidney disease.

These are routine every-day tests which are done for various reasons such as

- if someone is ill to check if a kidney problem could be the cause.
- part of routine checks in people with high blood pressure or diabetes.
- because there has been pain or difficulty passing urine.
- routine tests when starting a new job.

Who is more likely to get Chronic Kidney Disease?

Anyone can develop CKD but it is more common with increasing age and in people of South Asian and African/Caribbean origin (largely because they are more likely to get diabetes and high blood pressure).

What do the tests mean?

There are 5 categories of CKD, called stages.

Stage 1

This covers people with problems such as protein in the urine whose **GFR is normal.**

Action: see 'What can be done about CKD?' in this leaflet.

Stage 2

This covers people with problems such as protein in the urine whose **GFR is 60-89%.**

Action: see 'What can be done about CKD?' in this leaflet.

Otherwise GFR 60-89% does not mean CKD.

Stage 3

GFR 30-59%

This means the kidneys are not working so well

Action: see 'What can be done about CKD?' in this leaflet.

Stage 4

GFR 15-29%

This means more marked kidney changes

Action: More frequent checks needed. Explain dialysis and transplant options.

Stage 5

GFR less than 15%

Approaching need for dialysis

Action: More frequent checks needed. May need to start dialysis or have a transplant.

Someone who has given a kidney to a relative on dialysis could have a GFR test of half the normal amount (GFR 50%). This is the same as stage 3 which shows that people can be very well with low GFR tests...

... So why does it matter?

Why does GFR matter?

Because a lot can be done to prevent future health problems. People with CKD tend to have high blood pressure which can cause narrowing of the arteries and lead to heart and circulation problems. High blood pressure can also make kidney conditions worse. Regular checks, and in particular careful blood pressure control, can be a big help in preventing these problems and in stopping the kidneys getting worse. Other steps that can be taken are described over the page.

What do kidneys do?

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.

Healthy kidneys do a number of important things. They remove wastes and toxins from the body by filtering the blood, and by varying the amount of urine passed (depending on how much we drink) the kidneys make sure the body retains the right amount of water.

What causes Chronic Kidney Disease?

The commonest causes are high blood pressure (also called hypertension) and diabetes. In both of these it usually takes many years before the kidneys become affected. It is more common if the blood pressure or the diabetes hasn't been as well controlled as it should be. Other less common conditions are caused by inflammation (glomerulonephritis) or infections (pyelonephritis). Sometimes CKD is inherited (polycystic disease) or the result of longstanding blockage (such as enlarged prostate or kidney stones). Some drugs can cause CKD, especially some pain-killing drugs (analgesics) if taken over a long time. Often it isn't possible to say what has caused the problem.