

## Kidney disease – prevention

### Summary

Kidney disease risk factors include diabetes, high blood pressure, obesity, smoking and age. Early detection and treatment can increase the life of your kidneys. High blood pressure can lead to or be a sign of kidney disease. Maintaining a healthy weight through exercise and a balanced diet, and not smoking will help to keep your kidneys working well.

### Risk factors for kidney disease

You are more 'at risk' of chronic kidney disease if you:

- Have diabetes
- Have high blood pressure
- Are obese
- Are over 60 years of age
- Have a family history of kidney disease, such as polycystic kidney disease
- Have scarring of the kidney caused by backflow of urine from the bladder
- Smoke
- Have established heart problems (heart failure or past heart attack) or have had a stroke
- Are of Aboriginal or Torres Strait Islander origin.

### High blood pressure can damage kidneys

High blood pressure (hypertension) is increased pressure inside the arteries that carry blood from your heart to all parts of your body. Untreated, high blood pressure can damage your kidneys. All high blood pressure strains the heart and damages arteries.

If blood pressure is uncontrolled and remains high, it can damage the vessels that supply blood to your internal organs. The very small vessels are often the first to be affected. If left untreated, this can lead to kidney disease, heart attack, strokes and loss of vision.

There are a number of different causes of high blood pressure, but most high blood pressure has no known cause. You are more at risk of high blood pressure if you are older or have a family history of the condition.

High blood pressure can also develop as a result of kidney disease or renal artery stenosis (narrowing of the main artery to one or both kidneys). Your kidneys control the amount of fluid in your blood vessels and produce a hormone called renin that helps to control blood pressure.

### Medication and lifestyle changes can lower blood pressure

A range of medication is available for high blood pressure. Different blood pressure medications work in different ways, so it is not unusual for more than one type to be prescribed. The dose may alter according to your needs.

Medications that can lower blood pressure include:

- ACE inhibitors
- Angiotensin receptor blockers
- Calcium channel blockers
- Beta blockers
- Low-dose diuretics (fluid tablets)
- Alpha blockers.

Healthy lifestyle choices are important to improve your overall health and lower your risk of high blood pressure. They can also reduce the amount of medication you need or make your medication work better. Healthy lifestyle choices include not smoking, eating a healthy diet, staying fit, maintaining a healthy weight, avoiding certain medications and avoiding stress.

### **Symptoms of kidney disease**

Kidney disease is called a 'silent disease' as there are often few or no symptoms. Some signs and symptoms include:

- A change in the frequency and quantity of urine passed, especially at night (usually an increase at first)
- Blood in the urine (haematuria)
- Foaming urine
- Puffiness around the eyes and ankles (oedema)
- Pain in the back (under the lower ribs, where the kidneys are located)
- Pain or burning when passing urine.

When the kidneys begin to fail, there is a build-up of waste products and extra fluid in the blood as well as other problems, gradually leading to:

- Tiredness, inability to concentrate
- Generally feeling unwell
- Loss of appetite
- Nausea and vomiting
- Shortness of breath.

### **Treatment for kidney disease**

If detected early enough, the progress of kidney disease can be slowed and sometimes even prevented. In the early stages, changes to diet and medication can help to increase the life of your kidneys.

If kidney function is reduced to less than 10 per cent of normal, the loss of function must be replaced by dialysis or a kidney transplant. Dialysis is a treatment for kidney failure that removes waste products and extra water from the blood by filtering it through a special membrane (fine filter).

### **Diagnosis of kidney disease**

Early detection of kidney disease can be lifesaving. Medication and changes to lifestyle, along with an early referral to a kidney specialist (nephrologist), can prevent or delay kidney failure.

If you are 'at higher risk' of chronic kidney disease, talk to your doctor about having a regular kidney health check. This includes:

- Blood pressure test
- Blood test for kidney function
- Urine test for albumin in the urine (albuminuria).

If you have high blood pressure or diabetes, you should have the kidney health check every year,

### **Lifestyle changes can keep your kidneys healthy**

Making healthy lifestyle choices can help to keep your kidneys functioning well such as:

- Eat lots of fruit and vegetables including legumes (peas or beans) and grain-based food like bread, pasta, noodles and rice.
- Eat lean meat like chicken and fish each week.
- Eat only small amounts of salty or fatty food.

- Drink plenty of water instead of other drinks. Minimise consumption of sugary soft drinks.
- Maintain a healthy weight.
- Stay fit. Do at least 30 minutes of physical activity that increases your heart rate on five or more days of the week, including walking, lawn mowing, bike riding, swimming or gentle aerobics.
- If you don't smoke, don't start. If you do, quit! Call the Quit line on 131 848 or ask your doctor for assistance with quitting.
- Limit your alcohol to two small drinks per day if you are male or one small drink per day if you are female.
- Have your blood pressure checked regularly.
- Do things that help you relax and reduce your stress levels.

### **Things to remember**

You can look after your kidneys by eating healthy food, staying active and maintaining a healthy weight.

Many diseases can affect your kidneys.

Have your blood pressure checked regularly.