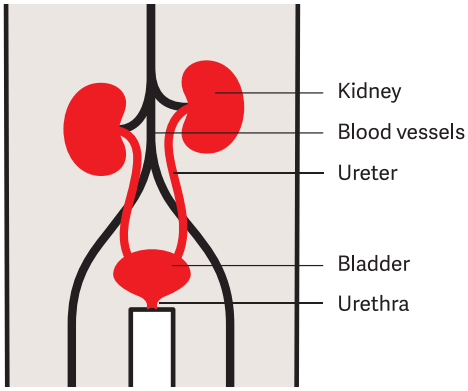
Kidney Health Australia
Prevent, Detect, Support.

Fact sheet

IgA Nephritis



How do the kidneys work?

The kidneys are two large bean-shaped organs located in your lower back.

Each kidney contains up to one million tiny filtering units, called nephrons. Inside a nephron, there is a tiny set of blood vessels called the glomerulus. The glomerulus filters your blood allowing excess fluid and waste to pass into your urine.

In a healthy kidney, this filter helps to keep blood cells and protein in your bloodstream.

What is nephritis?

Nephritis is a group of diseases that cause inflammation (damage) of the filtering units in the kidneys. Damage of these filtering units can reduce the kidney's ability to filter waste from the blood. There are many different types of nephritis.

IgA nephritis (also called IgA nephropathy) is the most common type of nephritis in Australia.

What is IgA nephritis?

IgA refers to the IgA antibody molecule. This is a normal protein found in all of us which helps us to fight infections in the throat, airways, and intestine.

In IgA nephritis, the IgA antibody causes damage to the kidney filters. This allows protein and blood to leak into your urine. Both kidneys are affected by this condition.

IgA nephritis is a type of kidney disease that may slowly worsen over 10 to 20 years.

What causes IgA nephritis?

The cause of IgA nephritis is not fully understood, however many possible causes of IgA nephritis are being studied. If enough kidney filters are damaged, then kidney disease occurs.

Who gets IgA nephritis?

IgA is one of the most common kidney diseases. It is found more often in males than females and it is usually diagnosed around the age of thirty. However, it can affect people of all ages. In most cases, the disease is not thought to be hereditary but in some families there may be a genetic link.

What are the signs of IgA nephritis?

IgA nephritis may be picked up during routine health checks.

Signs of IgA nephritis can include the following:

- No symptoms
- Blood in your urine (haematuria) - can make urine pink or cola-coloured
- Protein in your urine (albuminuria or proteinuria) - can cause frothy urine
- High blood pressure (hypertension) - can cause widespread damage in the body if left untreated, such as headaches, kidney damage, strokes and heart disease
- Anaemia - not enough red blood cells in your blood, which can cause tiredness and shortness of breath
- Kidney disease, may need dialysis or transplant.

The majority of people with IgA nephritis develop high blood pressure. High blood pressure must always be treated. Many people with IgA nephritis have mild chronic kidney disease that has no symptoms but needs to be monitored. Unfortunately, a small number of patients (around 20%) may develop severe hypertension (high blood pressure) and kidney disease. If the kidney disease is very severe, the patient may need treatment with either dialysis or kidney transplantation.

See *Anaemia*, *Blood in Urine*, *Albuminuria*, *All about Chronic Kidney Disease* and *Nephritis* fact sheets for more information.

How is IgA nephritis diagnosed and treated?

Finding blood or protein in your urine combined with the other common complications suggest signs of kidney damage. A kidney biopsy will be required to accurately diagnose IgA nephritis. During a kidney biopsy, a very small sample of kidney tissue is removed and then examined under a microscope.

There is currently no cure for IgA nephritis. Slowing the disease by treating high blood pressure and treating other chronic kidney disease (CKD) risk factors are key treatment goals.

Control of high blood pressure is the most important treatment for IgA nephritis. Studies show that use of medications such as angiotensin converting enzyme inhibitors (ACE-i) or angiotensin receptor blockers (ARB) is an effective treatment for high blood pressure. These drugs lower blood pressure and help to protect kidney function. Other medications such as beta-blockers and calcium-channel blockers may also be used to reduce your blood pressure.

Fish oil supplements may help to reduce inflammation.

New treatment such as immune-suppressing drugs are being tested to see if it can help to slow down kidney disease but have not yet been proven.

Discussion with a kidney specialist will help decide whether these are useful treatment options for you.

Regular visits to a doctor or kidney specialist are important for anyone with IgA nephritis.

THINGS TO REMEMBER

- IgA nephritis is a type of kidney disease that may slowly worsen over 10 to 20 years.
- There is currently no cure for IgA nephritis, so treatment of blood pressure and managing other CKD risk factors are extremely important .
- The majority of people with IgA nephritis develop high blood pressure, which must always be treated.

What does that word mean?

Albuminuria - Occurs when albumin is present in the urine. There are filters in the kidneys that prevent large molecules, such as albumin, from passing through. If these filters are damaged, albumin passes from the blood into the urine.

Anaemia - When there are only a small number of red blood cells in your blood or your blood cells are not working properly. Red blood cells carry oxygen, so if you have anaemia you can feel weak, tired and short of breath.

Antibody - A protein molecule made by your immune system to attack tissue that is not normally part of your body (e.g. viruses and bacteria).

Dialysis - A treatment for end stage kidney disease that removes waste products and excess fluid from your blood by filtering your blood through a special membrane. There are two types of dialysis; haemodialysis and peritoneal dialysis.

Glomerulus - One of the key structures that make up the nephron which is the filtering unit of the kidney.

Haematuria - Blood in your urine. It can turn urine a red or dark cola colour, which is visible to the eye OR may only be found by a urine test (microscopic haematuria). Blood in the urine is a common sign of urinary tract infections but can be the first sign of a problem with the kidneys or the bladder.

Hereditary - Diseases that are passed from parents to their children.

Hypertension - High blood pressure can cause chronic kidney disease and chronic kidney disease can cause high blood pressure.

IgA nephritis - A common type of glomerulonephritis where build-up of the IgA antibody damages the kidney filters, allowing protein and blood to leak into the urine.

Kidney Biopsy - A small piece of kidney tissue is removed for testing and examined under a microscope.

Kidney transplantation - A treatment for end stage kidney disease where a kidney is removed from the body of one person (the donor) and put into the body of the person with end stage kidney disease.

Nephron - The tiny parts of the kidney that filter blood to make urine. There are over one million filters in each kidney.

Proteinuria - Too much protein in your urine.

For more information about kidney or urinary health, please contact our free call Kidney Health Information Service (KHIS) on 1800 454 363.

Or visit our website **kidney.org.au** to access free health literature.

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