

Lupus nephritis

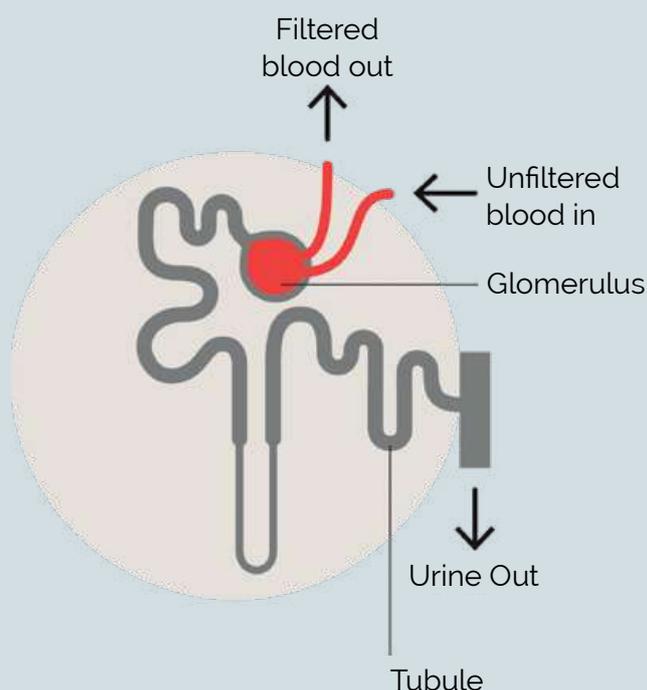
What is lupus?

Systemic lupus erythematosus, often called lupus, is a disease that causes swelling (also called inflammation) in many different parts of your body, including your skin, joints, kidneys, lungs and brain.

Lupus is a disease where your body's defense system (called the immune system) does not work the way it should. Your immune system **protects your body** against germs by producing antibodies. With lupus, the immune system does not work properly and makes antibodies against your own tissues.

Symptoms can range from a mild skin rash to a serious life-threatening disease. Lupus can affect your skin, joints, lungs, heart, and kidneys.

One Nephron



What is lupus nephritis?

Each kidney contains up to one million nephrons, the filtering units of the kidneys. Inside a nephron is a tiny set of looping blood vessels called the glomerulus.

Nephritis is a group of diseases that cause swelling 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.

When lupus affects your kidneys, it is called '**lupus nephritis**'.

Your immune system attacks the filters of the kidneys causing swelling and scarring. This means your kidneys can not do their job so well. Lupus nephritis is seen in almost half of all people with lupus.

What causes lupus?

No one knows exactly what causes lupus. A number of factors are linked to lupus:

- **Genetic factors:** there is a link between gene mutations (mistakes) and the development of lupus nephritis.
- **Infections and viruses:** when your immune system overacts to germs, it can cause your own antibodies to damage healthy tissues.
- **Sunlight:** many people with lupus are sensitive to the sun suggesting a link.
- **Stress and hormones:** added stress on your body and changes in hormones can trigger lupus.

What are the symptoms of lupus?

Lupus can have a large range of symptoms that are also seen in other diseases, which can make the diagnosis difficult.

The symptoms of lupus include:

- skin rashes particularly in areas exposed to the sun, such as the face
- joint pains
- feeling tired or fatigued
- hair loss
- sores in your mouth (ulcers)
- fevers
- feeling generally unwell

Many people with **lupus nephritis** have general symptoms, like feeling unwell and tired. Lupus nephritis can cause other problems, such as:



swelling of your ankles, legs, fingers or face



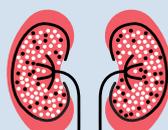
high blood pressure



blood in your urine (haematuria)



protein in your urine (proteinuria)



chronic kidney disease



kidney failure



Who is at risk of lupus?

Lupus is more common in women than men. It can affect people at any age but it usually starts between the ages of 15 and 44. There is a genetic (family history) link, but even if you have a close relative (parent or sibling) with lupus, your risk of developing the disease is less than 10 per cent.

How is lupus diagnosed?

Your doctor will diagnose lupus by taking a history of your symptoms. No one single test can detect lupus. Tests include:



A **blood test** to look for antibodies and test kidney function



A **urine test** to look for blood and protein



A **kidney biopsy** to collect a tissue sample to look at under a microscope

If you do not have lupus nephritis at the time when lupus is diagnosed, your doctor will want to continually monitor your kidney function. Luckily, there are treatments that can help slow down the disease and protect your kidneys.

How is lupus treated?

Your rheumatologist (a specialised doctor for immune disease) will recommend a treatment plan for your lupus. Lupus cannot be cured but usually **responds well to treatment**. Early treatment is key to slowing down the disease.

Treatment depends on the type of lupus and level of damage to your kidneys.

In more severe cases, you may take medicines that block your immune system (called immunosuppressive medicines). These medicines help to **prevent damage** to your healthy tissues by calming down your immune system.

In addition, these medicines help to reduce flare-ups or worsening of your lupus symptoms. Some medicines used for lupus include:

- hydroxychloroquine
- corticosteroids
- cyclophosphamide
- mycophenolate
- mycophenolate sodium
- rituximab
- tacrolimus

Starting these medicines early can slow down the disease, but there are some risks with immunosuppressive medicines. By blocking your immune system, these medicines can increase your risk of infections. Speak to your doctor or pharmacist if you have any questions about your medications.

There are **six different types** (Class I through Class VI) of lupus nephritis. These classes depend on the location and amount of kidney damage.

Class I or class II are milder forms of lupus nephritis. Class III through Class VI can have more complications and often require treatments with medicines.

Class IV, also known as **diffuse lupus nephritis**, is the most common type. Class VI nephritis occurs when more than 90% of your glomeruli are damaged.

Treatments for lupus nephritis

Your nephrologist (kidney doctor) may also prescribe medicines to help protect your kidneys and slow down the disease. These include:

- **Blood pressure tablets** (such as ACE inhibitors which end in -PRIL or ARBs ending in -SARTAN) to lower your blood pressure and to help your kidneys work better for longer.
- **Cholesterol lowering medicines** (such as statins) to protect your heart, as both lupus nephritis and kidney disease can increase risks to your heart.

10-30% of people with lupus nephritis develop kidney failure within 10 years. **Dialysis and kidney transplant are treatment options for kidney failure.** To learn more about treatment choices for kidney failure, check out our **My Kidneys, My Choice** decision aid.



Medicines can help to calm your immune system and protect your kidneys.

Looking after yourself with lupus nephritis

Be sure to work with your health care team to receive the right treatment and advice. Manage other health conditions (such as high blood pressure), look after your wellbeing and overall health, and take your prescribed medicines. Taking care of your health can improve your overall wellbeing.



Protect yourself from the sun



Make moderate physical activity a habit



Be a non-smoker



Eat a healthy diet



Reduce your stress levels



Stay up-to-date with your vaccinations



What if I am struggling to cope?

If you have been diagnosed with lupus nephritis it is not unusual for you to feel scared, frustrated, sad or angry. Acknowledge your feelings and ask for help if you need more support.

If you feel overwhelmed and need professional mental health support, you can call the Beyond Blue support line at 1300 224 636 or visit www.beyondblue.org.au. For crisis support, call Lifeline at 13 11 14 or visit www.lifeline.org.au.

Know that you're not alone on your kidney health journey. **Kidney Health 4 Life**, a free wellness program and support service, can help connect you to others with kidney disease who may understand what you are going through.

Whether you're newly diagnosed or struggling through your treatments, our peer support services offer a safe space to share experiences, ask questions, and find encouragement. Visit kidneyhealth4life.org.au to learn more.



What is the long-term outlook for lupus nephritis?

Lupus nephritis can range from mild to very serious, but the good news is that most people respond well to treatment. Medicines help to slow down the disease and reduce the symptoms, helping you feel better for longer.

Some people have severe lupus nephritis that leads to kidney failure. With kidney failure, you may need dialysis or a kidney transplant.

New treatments for lupus nephritis have shown promise specifically for **slowing the loss of kidney function**. These may not be widely available in Australia. There are several ongoing studies exploring new treatments for lupus nephritis.

Talk to your nephrologist about which treatments are best for you.



Things to remember:

- ✓ **Lupus is an autoimmune disease that can be mild or life-threatening.**
- ✓ **Medicines can help control the symptoms of lupus. Controlling your blood pressure and practising a healthy lifestyle can help your kidney health.**
- ✓ **Stay out of the sun to reduce your risk for flare ups and skin cancer.**

What does that word mean?

Antibodies – a protein that fights infections including bacteria and viruses as well as foreign bodies eg donated kidney.

Autoimmune – An autoimmune disorder occurs when a person's immune system mistakenly attacks their own body tissues.

Biopsy – a procedure to obtain a small piece of kidney tissue so it can be looked at under a microscope.

Blood pressure – the pressure of the blood in the arteries as it is pumped around the body by the heart.

Immunosuppressive drugs – Medication that weakens the body's normal immune system. They are taken by transplant rejection recipients to prevent the body from rejecting the kidney.

Dialysis – a treatment for kidney failure, which removes wastes and extra fluid from the blood by filtering it through a special membrane.

Nephrologist – A doctor who specialises in treating conditions of the kidney.

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

Transplant – to transfer an organ or portion of tissue from one person to another.

 **Kidney Health**
Australia

Free Kidney Helpline 1800 454 363
kidney.org.au

If you have a hearing or speech impairment, contact the National Relay Service on 1800 555 677 or relayservice.com.au. Have them connect you to the Free Kidney Helpline - 1800 454 363 



**WANT TO
LEARN MORE?**

Kidney Health 4 Life is a health and wellbeing program equipping people, and those that care for them, with the knowledge and resources to take more active management of their kidney health or kidney disease.



**Join Kidney Health 4 Life
by scanning the QR code**

This is intended as a general introduction to this topic and is not meant to substitute for your doctor's or health professional's advice. All care is taken to ensure that the information is relevant to the reader and applicable to each state in Australia. It should be noted that Kidney Health Australia recognises that each person's experience is individual and that variations do occur in treatment and management due to personal circumstances, the health professional and the state one lives in. Should you require further information always consult your doctor or health professional.

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