

# Glomerulonephritis

## Overview

This leaflet has an overview of this topic.

Go to [www.infoKID.org.uk](http://www.infoKID.org.uk) to find out more about this topic,  
or to find other topics for parents and carers about children's kidney conditions.

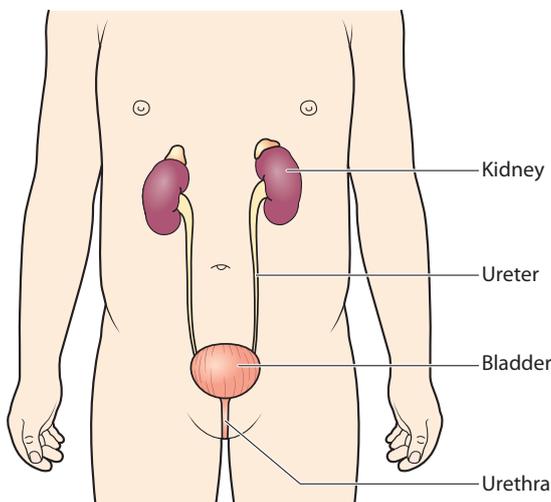
Glomerulonephritis is a group of conditions that cause inflammation (swelling) in the kidneys. Children with glomerulonephritis have blood and protein in their urine, and may have swelling in their body, especially in their face and legs. Glomerulonephritis may lead to other complications, including high blood pressure.

All children with glomerulonephritis are carefully monitored by a team of healthcare professionals. Some need to stay in hospital for a few days, but most of the time they will need to visit the hospital during the day only.

For many children, glomerulonephritis is quite mild and they will get better. Some need further care to help them get back to health. Some children will have long-term problems with their kidneys, and will need to be monitored and have specialist treatment when it is needed.

If your doctor has told you that your child has a specific type of glomerulonephritis, or a condition that causes glomerulonephritis, please go to the topic on [www.infoKID.org](http://www.infoKID.org)

- Post-infectious glomerulonephritis (PIGN)
- Membranoproliferative glomerulonephritis (MPGN)
- IgA nephropathy
- Henoch–Schönlein purpura (HSP)



### About the urinary system

The **urinary system** gets rid of things that the body no longer needs, so that we can grow and stay healthy.

The **kidneys** are bean-shaped organs. They filter blood to remove extra water, salt and waste in urine (wee). Most of us have two kidneys. They are at the back on either side of our spine (backbone), near the bottom edge of our ribs.

The two **ureters** are long tubes that carry urine from the kidneys to the bladder.

The **bladder** is a bag that stores urine until we are ready to urinate (wee). It sits low down in the tummy area.

The **urethra** is a tube that carries urine from the bladder to the outside of the body.

# Symptoms and complications

## Symptoms and signs

Some children with glomerulonephritis do not have any symptoms and signs, especially in the early stages of the disease. Common symptoms and signs of glomerulonephritis include:

- blood in the urine (**haematuria**) – you cannot always see the blood, but if there is a lot, the urine may be coloured red or dark brown (like a cola drink)
- protein in the urine (**proteinuria**) – you cannot usually see the protein, but sometimes it can make the urine look frothy. It can be found on a simple urine test.
- urinating less often or smaller amounts
- swelling or puffiness in different parts of the body, especially around the eyes, legs and feet – this is called **oedema**
- swelling in the abdomen (tummy) or breathlessness, but this is rare

## Complications

Some children have complications – health problems that happen because of the condition or its treatment.

- Glomerulonephritis may lead to blood pressure that is too high (**hypertension**).
- Occasionally, the condition gets worse quickly and the kidneys work less well than normal – this is called **rapidly progressive glomerulonephritis (RPGN)**.
- RPGN is one cause of **acute kidney injury (AKI)** – when the kidneys quickly stop working as well as they should, over a short time.

## Causes

Glomerulonephritis can happen in people of all ages, including children.

Occasionally, it is not known why a child has glomerulonephritis. It may happen:

- because of a problem with your child's immune system, which normally protects the body against infection and disease
- after an infection
- as part of another condition
- because it has been inherited (runs in families)

# Tests and diagnosis

Your child's doctor can **diagnose** (identify) glomerulonephritis with a **urine test**. It is often picked up during a urine test for another reason – a **urinary tract infection (UTI)**.

Your doctor will speak with you and your child about the symptoms and do a physical examination. Your child may also need other tests, such as **blood tests** and an **ultrasound scan**.

## Treatment

### Where will my child be treated?

Your child will be looked after by a **paediatrician**, a children's doctor.

A few children are referred to a **paediatric renal unit**. This is a special unit for children with kidney problems, which may be in a different hospital to your own. Your child will be looked after by a **paediatric nephrologist**, a doctor who treats children with kidney problems.

Your child may need to stay in hospital for a few days or longer. Most of the time, children with glomerulonephritis have their care as **outpatients**. This means that your child will visit the hospital during the day and go home.

### About treatment

Your child may need to make changes to what he or she eats or drinks. Many children need to take medicines that aim to reduce the amount of protein lost in their urine. Occasionally, other medicines are needed.

## About the future

### Follow up

All children with glomerulonephritis need to go back to the hospital or clinic for follow-up appointments to check for any health problems.

### Long-term effects

Your healthcare team will speak with you and your child about any long-term effects your child might have with glomerulonephritis.

For many children, the disease is quite mild. They will get better with no long-term problems with their kidneys. Some need further care to help them get back to health.

In some children, the kidneys stop working as well as they should – this happens slowly, often over many years. This is called **chronic kidney disease (CKD)**. If your child develops CKD, you will learn more over time about what to expect and how to help manage the condition.

» [More about glomerulonephritis on www.infoKID.org.uk](http://www.infoKID.org.uk)

# Your notes and contact information

[www.infoKID.org.uk](http://www.infoKID.org.uk)



**Version 2, February 2017. © RCPCH, BAPN and BKPA 2013, all rights reserved. Reviewed by: February 2020.**

For details on any sources of information used in this topic, please contact us through our website, [www.infoKID.org.uk](http://www.infoKID.org.uk).

We take great care to make sure that the information in this leaflet is correct and up-to-date. However, it is important that you ask the advice of your child's doctor or nurse if you are not sure about something. This information is intended for use in the United Kingdom, and may not apply to other countries.

Royal College of Paediatrics and Child Health (RCPCH), British Association of Paediatric Nephrology (BAPN), British Kidney Patient Association (BKPA) and the contributors and editors cannot be held responsible for the accuracy of information, omissions of information, or any actions that may be taken as a consequence of reading this information.