

Your Guide to Understanding C3G Terms

Are all the medical words getting confusing?
To help demystify the jargon, we created a glossary of frequently used terms.

Living with C3G? Go to [KidneyHope.com](https://www.kidneyhope.com)



Doctor & patient portrayal.



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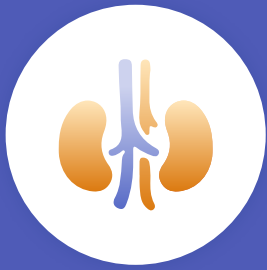
Feel more informed about your condition

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Diagnosed with C3G? Find support at [KidneyHope.com](https://www.kidneyhope.com)



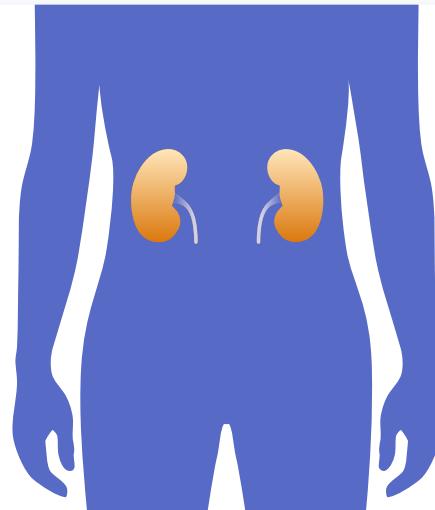


What is C3G?

Complement 3 glomerulopathy (C3G) is a rare, recently identified kidney disease. Doctors and researchers are still learning about it.

Your kidneys

You have 2 kidneys. Each one is about the size of your fist and located just below the rib cage. Unlike your gall bladder, or your appendix, your kidneys are vital organs you need to survive.

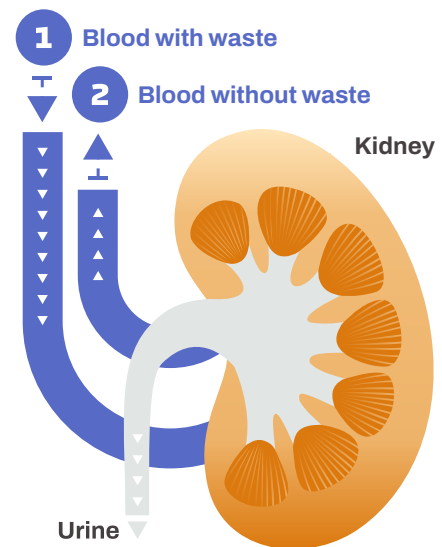


What your kidneys do

- Filter waste and toxins from your blood
- Regulate blood pressure
- Help to make red blood cells
- Support bone health

How your kidneys work

- Each of your kidneys is made up of about a million fine filters called nephrons
- The nephrons work through a 2-step process:
 - 1** Each nephron includes the glomerulus, a specially modified blood vessel that filters unneeded substances from your blood in the form of urine.
 - 2** The nephrons also include very tiny blood vessels called capillaries that return needed substances to your blood and remove waste.

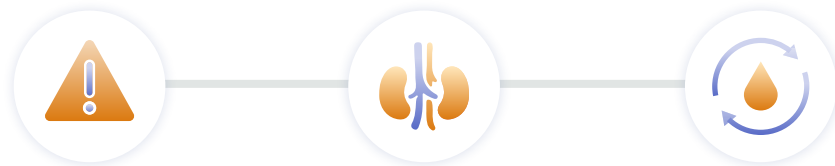




Kidney function and the immune system

The immune system protects your body from harmful substances, germs, and unwanted changes to your cells that could make you ill.

Your kidneys and your immune system work as a team and depend on each other to stay healthy.



By filtering toxins, the kidneys help balance vital functions of the immune system. At the same time, your immune system protects your kidneys from foreign elements that could disrupt their function.

Autoimmune disease

When your body's natural defense system mistakenly attacks healthy cells.

Immunodeficiency

When your immune system can't adequately protect your body from infection.

Renal

Anything pertaining to the kidneys.

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The complement system

Also known as the complement cascade, this is a part of the immune system that helps antibodies remove unneeded substances from damaged cells. If the complement system becomes overactivated, the kidneys can be harmed.

Antibodies

Proteins produced by your immune system that protect your body from unwanted substances. Without antibodies, infections could impact kidney function.

Autoantibodies

Antibodies that mistakenly target and react with your own body. This could trigger autoimmune damage to different parts of the body, including the kidneys.

Dysregulation in C3G

C3G is an example of an autoimmune disease where the dysregulated immune system attacks normal kidney tissue.

C3 (complement component 3)

A type of plasma protein or chemical substance in the immune system that plays a central role in the complement system. When the alternative complement system is overactive, C3 break-down products can deposit in the kidneys, causing inflammation and damage, which could result in C3G.



Interested in more resources?

Find ways to discuss your condition with those you care about.
Find the support you need at [KidneyHope.com](https://www.kidneyhope.com)





Kidney disease progression

A deeper understanding of these terms can help you understand your condition.



The 5 stages of kidney disease

There are 5 stages of kidney disease. The rate of kidney function decline can vary from one person to another, with multiple factors playing a role in disease progression.

Stage	1	2	3	4	5
Kidney function	Slight kidney damage with normal kidney function	Mild loss of kidney function	Mild, moderate, or possibly severe loss of kidney function	Moderate to severe kidney damage, loss of function	Advanced kidney disease, or end-stage disease
% of normal kidney function based on GFR	90% or higher	60%-89%	30%-59%	15%-29%	Less than 15%
Symptoms	Usually none	Usually none	Possible changes in urine and swelling	All symptoms of stage 3, plus possible shortness of breath	Includes symptoms from earlier stages, plus possible difficulty breathing or sleeping, feeling very weak, chest pain, difficulty concentrating, nausea, or vomiting
Management and treatment	Management of blood pressure, cholesterol, and blood sugar level is considered, to help keep kidney disease from worsening	Management of blood pressure, cholesterol, and blood sugar level is considered, to help keep kidney disease from worsening	The use of medication is considered to manage any other conditions, such as blood pressure, blood sugar, and cholesterol levels	Regular visits with your nephrologist to take steps to slow kidney damage and plan for possible treatments for advanced chronic kidney disease, to include bone disease or anemia	Dialysis and transplantation may be considered

GFR, glomerular filtration rate.





Asymptomatic

When you show no symptoms of disease. Without showing symptoms, it can be difficult to get a diagnosis. If you've been diagnosed with C3G, your kidneys are being affected even though you may not feel the symptoms.

CKD

Chronic kidney disease is the gradual, ongoing loss of kidney function.

ESKD/ESRD

End-stage kidney disease, also called end-stage renal disease. This is the last stage of chronic kidney disease, when your kidneys can no longer support your body's needs, and dialysis treatment is required.

Hemodialysis

Hemodialysis is the most common type of dialysis. A machine outside the body is used to remove waste products and excess fluid from the blood when the kidneys stop working properly. Treatment usually takes about 3 to 5 hours each time and is done 3 times a week. You may experience a drop in blood pressure. If this happens, you may feel sick to your stomach, or have a headache or cramps.

Kidney transplant

A person with ESRD has a kidney from a living or deceased donor surgically implanted.



**Discover more about symptoms,
management, and supportive care**

Find the support you need at **KidneyHope.com**





Testing kidney function

Learn about tests, their relevance, and target numbers.



Lab Test

UPCR (urine protein-to-creatinine ratio):
A measurement of the levels of proteins and creatinine (a byproduct of muscle metabolism) in your urine

Hematuria:
Checking for the presence of blood in the urine

Blood pressure (BP):
The pressure of blood pushing against the walls of your arteries

GFR/eGFR (glomerular filtration rate/estimated GFR):
A measurement of how well the kidneys filter or “clean” the blood

Biopsy:
Taking one or more tiny pieces of the kidney to look at with a special microscope



Relevance

Long-term higher-than-normal levels of proteins in your urine can be a sign of progressive kidney damage that can lead to kidney failure

Blood in your urine may occur due to inflammation in the kidney

High blood pressure can damage the kidneys and reduce function

eGFR is tracked over time to determine the “stage” of kidney disease on a **scale of 1 to 5**

For some kidney problems, a correct diagnosis can only be made with a **kidney biopsy**



Procedure

Tested using a **urine sample**

Tested using a **urine sample**

BP is measured using a cuff

Tested using a **blood sample**

1. A **biopsy sample** is taken using a needle guided by ultrasound
2. A **biopsy sample** is taken directly from the kidney during a procedure performed by a nephrologist or interventional radiologist



Test Numbers

Higher levels of protein in your urine can lead to a diagnosis of kidney disease or related conditions

If your test result **shows blood in your urine**, you may need more tests to find out why

Guidelines recommend **targeting a systolic blood pressure of 120 mm Hg**

In general, **eGFR numbers go down** as chronic kidney disease gets worse

Results can show:

- How serious your condition is
- How quickly your condition is progressing





Feel more informed about your condition

Knowing these frequently used terms may help you better navigate your treatment journey.

Medications

- **Corticosteroids:** Medications used to treat a variety of inflammatory diseases.
- **ACEi/ARB:** Angiotensin-converting enzyme inhibitors and angiotensin receptor blockers are medications used to help reduce blood pressure and proteinuria, slow progression of kidney disease, and improve outcomes in patients who have heart failure, type 2 diabetes, or a history of heart attacks.
- **Immunosuppressants:** A variety of medications prescribed to help protect your new kidney after transplant. These medications suppress your body's natural immune response and trick your body into believing your new organ is not foreign. You'll need to take these medications for the rest of your life.

Nutrition guidelines

- **Fish oil, omega-3 fatty acids:** Supplements used to help prevent kidney inflammation and slow the progression of kidney disease. Be sure to consult your doctor before taking fish oil, omega-3 fatty acid, or any other supplements.
- **Kidney-friendly diet:** Your doctor may prescribe a food plan to help you manage your kidney disease and slow damage to your kidneys. This diet will help to keep certain minerals from building up, which is important because your kidneys do not work as well to remove waste products from your body.

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Health insurance terms

- **Coinsurance:** A type of insurance in which you pay a share of the payment.
- **Co-pay:** A fixed amount (\$20, for example) you pay for a covered health care treatment or service after you've met your deductible.
- **Deductible (Ded):** The total amount you pay for covered health care treatment or services before your insurance plan starts to pay.
- **In-network (INN):** When a doctor, hospital, or other provider accepts your health insurance plan, they are in network.
- **Prior authorization (PA):** A requirement by health plans for patients to obtain approval of a health care service or medication before the care is provided.
- **Maximum out-of-pocket (MOOP):** The most you must pay for covered services in a plan year.
- **Explanation of benefits (EOB):** The insurance company's written explanation regarding a claim, showing what they paid and what the patient must pay.



Now that you've learned more about your condition, discover resources to help you in your everyday life

KidneyHope.com





Health care team

- **Pathologist:** A medical doctor who reviews tissue from the body under special microscopes to diagnose diseases.
- **Nephrologist:** A medical doctor who diagnoses and treats kidney diseases.

Symptoms

- **Edema:** Swelling caused by excess fluid trapped in your body's tissues. Swelling in the body often increases when a person has heart or kidney disease that is getting worse.
- **Fatigue:** A feeling of being tired and weak, often caused by a severe decrease in kidney function.
- **Renal hypertension:** High blood pressure caused by the narrowing of your arteries that carry blood to your kidneys. When your kidneys are not getting enough blood, they react by making a hormone that makes your blood pressure rise.



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