

Understanding and managing IgA Nephropathy (IgAN)

IgA Nephropathy (IgAN) is a rare kidney disease that causes damage when your own immune system makes too much of an antibody called **IgA**. The IgA builds up and becomes trapped in the kidneys' tiny filtering units (called glomeruli).

The buildup causes **inflammation** (swelling) that can damage the kidneys and make it harder for them to remove waste from the blood.

Over time, this damage can lead to chronic kidney disease and, in some people, kidney failure.

Many people with IgAN may not have any symptoms at first. As the disease advances, symptoms usually start to appear, such as:



Foamy urine (pee)



Urine that is pink or the color of cola



Swelling in your hands or feet or around your eyes



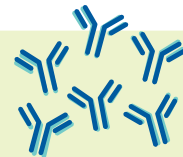
High blood pressure



Blood in your urine that you can see



Feeling weak and tired



Antibodies are a type of protein made by your immune system to protect against things like bacteria and viruses.

There is no cure for IgAN. But experts made **guidelines** to help you and your doctor figure out your treatment options and make a plan to manage IgAN.



This document is a summary of those guidelines. There are new medicines that have received U.S. Food and Drug Administration (FDA) approval since those guidelines were created. We have included all approved medicines in this guide.



Diagnosing IgAN

Doctors can only diagnose IgAN with a **kidney biopsy**.

What is a kidney biopsy?

A kidney biopsy is a procedure in which a doctor takes a small piece of your kidney tissue then looks at it with a microscope. This can help your doctor understand the cause and severity of your kidney damage.



The guidelines recommend a biopsy for adults who may have IgAN with at least 0.5 g/d of protein in their urine (pee).

Common tests used to check for protein in your urine (proteinuria) are:

- Urine protein-to-creatinine ratio (uPCR) which measures total protein in the urine
- Urine albumin-to-creatinine ratio (uACR) which measures the level of albumin (a specific protein in your blood) to the level of creatinine (a waste product in your blood that comes from your muscles)



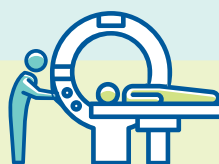
If you think you may have IgAN, ask your kidney doctor if a biopsy might be an option for you.

What happens during a kidney biopsy?

The most common type of kidney biopsy is called **needle biopsy**. In needle biopsy:

- You will be awake during the procedure.
- You will get medicine to help you relax and numb the area.
- Your doctor will guide a needle device into your kidney.
- Then they will take a small sample of kidney tissue.

Rarely, doctors do an **open biopsy**, which is a surgery with medicine to put you to sleep (anesthesia).



Ask your doctor about an ultrasound or CT-guided needle biopsy.

This uses imaging to help guide the biopsy needle to lower the chance they will hit a major blood vessel and cause severe bleeding.

How long does a biopsy take?



A kidney biopsy usually takes about one hour. But be prepared to spend extra time for recovery and in case there are delays.

Will it hurt?



For both a needle and an open biopsy, you will get medicine so that you do not feel pain during the procedure. After the procedure, you will likely be sore for a few days. You may be in more pain if you have an open biopsy.

What are the risks of a kidney biopsy?

Risks of a kidney biopsy are similar to any procedure, including:

- Bruising and pain
- Bleeding at the biopsy site or inside your body
- Damage to nearby organs
- Infection near the biopsy site

Your doctor will tell you how to take care of your biopsy site and things to watch for. **Contact them if something does not feel right.**

Tracking IgAN over time

Doctors track IgAN with uACR tests to measure albumin in the urine and uPCR tests to measure total protein in the urine. Having too much protein in your urine is a sign that your kidneys are not working to filter your blood properly because they are damaged. More protein can mean there is more damage.

Talk to your doctor about how often you should get your urine protein levels checked and what your results mean.



Treating IgAN

The goal of treating IgAN is to lower the amount of IgA build up and inflammation in the kidneys. This lowers the amount of protein in your urine, and slows down damage to your kidneys to prevent kidney failure and the need for dialysis or a kidney transplant.

You and your doctor will work together to create a treatment plan that works best for you. **You will likely be on multiple medicines that help protect your kidneys in different ways.**



The guidelines recommend that your treatment plan should include:

- Lifestyle changes, such as being active, making changes to what you eat and drink and keeping a healthy weight
- A medicine to lower your blood pressure
- Medicines that specifically treat IgAN



Researchers are doing clinical trials to learn more about:

- Treatments for IgAN, including if some work better than others
- Differences in how some IgAN treatments work due to a person's age, race, kidney function or other medicines



Lifestyle changes

An important part of treating IgAN is to take care of your overall health. This will help support your kidney function.

Here are some lifestyle changes you may need to make:

- **Be physically active** most days of the week, for at least 30 minutes.
- **Stop any tobacco use**, including cigarettes and vaping.
- **Follow a kidney-friendly eating plan**, which includes eating less salt and keeping a healthy weight.



Visit [**Kidney Kitchen**](#)[®] to find kidney-friendly recipes and learn more about kidney-friendly eating.

- **Keep your blood pressure lower than 120/70 mmHg.** Lifestyle changes and medicines can help you reach this goal.

Lifestyle changes alone are not enough to manage IgAN. Doctors also recommend taking medicines.



Medicines to lower blood pressure

These medicines help treat kidney diseases in general. They focus on lowering your blood pressure to protect your kidneys, because high blood pressure can damage your kidneys. These medicines can also lower the amount of protein that leaks into your urine, slow kidney damage and can lower your risk for heart disease.

- **ACE inhibitors** (such as lisinopril) or **ARBs** (such as losartan) lower blood pressure by relaxing your blood vessels so blood can flow more freely.
- **SGLT2 inhibitors** (such as empagliflozin) lower blood pressure by removing extra sugar from your blood.



Medicines specifically for IgAN

There are **two types of medicines** that specifically treat IgAN: medicines that lower the amount of protein in your urine and medicines that lower the amount of IgA antibodies or block inflammation. They help reduce harmful inflammation, which helps block the different ways IgAN damages your kidneys.



Medicines that lower the amount of protein in your urine and slow kidney decline

- **Endothelin receptor antagonists** (atrasentan) block the action of a hormone called endothelin. This helps reduce inflammation that causes damage to the kidneys over time.
- **Dual endothelin angiotensin receptor antagonists** (sparsentan) work in two ways:
 - **Lower your blood pressure and the pressure inside the kidneys' tiny filters.** They can replace an ACE inhibitor or ARB.
 - **Block the effects of two hormones** (endothelin and angiotensin) from triggering inflammation.



Medicines that lower the amount of abnormal IgA antibodies or block IgA inflammation

- **Targeted-release budesonide** (Nefecon) is a type of steroid that is released in the intestines, so it targets cells that make IgA. This helps lower the buildup of IgA in your kidneys.
- **Complement blockers** (iptacopan) block part of the complement system pathway, which is an immune response that can be triggered by IgA that is built up in your kidneys. This lowers inflammation in your kidneys from the immune response.
- **APRIL blockers** (sibeprenlimab-szsi) block a protein called APRIL (which stands for A PRoliferation-Inducing Ligand) that helps make IgA. This helps lower the buildup of IgA in your kidneys.
- **Dual APRIL/BAFF blockers** (atacicept) block APRIL and another protein called BAFF (which stands for B-cell Activating Factor), which help make IgA. This helps lower the buildup of IgA in your kidneys.

Steroids are another treatment option that may be recommended. They suppress your immune system which can help remove inflammation in the body including your kidneys.



Researchers are studying new medicines for IgAN in clinical trials, and some such as povetacicept, which is another type of a dual APRIL/BAFF blocker and ravulizumab, a medicine that blocks part of the complement system pathway, are also being reviewed by the FDA.

Taking your medicine is one of the best ways to control IgAN

It can be hard to remember to take all of your medicines. It is normal to miss a dose sometimes, but here are ways to help you remember:

- Set reminders on your phone or use a medicine tracker app.
- Use a weekly pill box or other medicine organizer.
- Take your medicines as a part of other daily routines (like brushing your teeth).

Learn more

To learn more about IgA Nephropathy visit KidneyFund.org/IgAN or scan this QR code:



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