

LOOK BEYOND THE KIDNEYS

IgA nephropathy (IgAN) is a progressive, chronic, autoimmune disease that begins with the immune system—not the kidneys. It causes irreversible damage to your kidneys. Over time, this damage can decrease your kidney function.

IgA nephropathy begins outside your kidneys, with your immune system.

Your immune system makes IgA (immunoglobulin A) to help fight infections from things like viruses and bacteria. However, in IgA nephropathy, your immune system also produces an abnormal form of IgA antibody called Gd-IgA1. This sets off a harmful chain reaction that ultimately damages your kidneys.

IgA: immunoglobulin A antibody

pathy: disease-causing

IgA nephropathy

nephro:

affects the kidneys

IgA nephropathy means your kidneys are being damaged by abnormal IgA.

The IgAN chain reaction, also known as the 4-hit process



Production of abnormal IgA

You body starts making abnormal IgA antibodies (Gd-IgA1).



Autoantibodies are produced

Your immune system doesn't recogize abnormal IgA and makes autoantibodies to target it.



Formation of immune complexes

Autoantibodies bind to abnormal IgA. Together they form large clusters called immune complexes. These clusters travel through your bloodstream.



Immune complexes lead to kidney damage

In the filtering parts of the kidneys, the nephrons and the glomeruli, the clusters get lodged. The immune system reacts to the clusters by causing inflammation and scarring (fibrosis), which can damage the nephrons and glomeruli.

APRIL (A PRoliferation-Inducing Ligand) may play a key role in starting the 4-hit process

HOW DOES THIS HAPPEN?

APRIL is one of the factors responsible for the production of the abnormal IgA antibodies that start the 4-hit process.



Everybody has APRIL in their body. It helps keep your immune system balanced. But in IgA nephropathy, APRIL can play a role in starting and keeping the harmful chain reaction going.



WHAT YOU NEED TO KNOW ABOUT LIVING WITH IgAN



Often, people living with IgA nephropathy are not aware they're experiencing any symptoms, **but permanent kidney damage may still be happening**.



IgA nephropathy signs and symptoms to be aware of



Protein in your urine (proteinuria) that can make your urine appear foamy



High blood pressure



Blood in your urine (hematuria) that can turn your urine dark brown or tea-colored*



Swelling (edema) in your feet or hands



Pain in one or both sides of your back, below your ribs, AKA flank pain



Fatigue

*Sometimes the blood is not visible to the naked eye and can only be detected by lab tests.



Know your numbers: key measures of disease progression

Regular urine and blood lab tests can show your nephrologist how your kidneys are working and whether there is active inflammation or disease progression.

- eGFR measures overall kidney function
- Proteinuria measures the amount of protein in the urine

Scan to access more helpful information at **Rethinklgan.com**



Discuss your numbers and any symptoms you've experienced with your nephrologist so you can work together to optimize your care.



eGFR=estimated glomerular filtration rate.