

Post Infectious Glomerulonephritis

What is Acute Post-Infectious Glomerulonephritis?

Acute Post-Infectious Glomerulonephritis (APGN) is a common form of kidney inflammation in children. Glomerulonephritis is the medical word used to describe damage to the tiny filters in the kidneys called glomeruli. These glomeruli are responsible for removal of waste products and extra water from the blood and making this into urine. APGN commonly occurs one to three weeks after an infection (for example, after strep throat). APGN affects **both** kidneys.

What causes Acute Post-Infectious Glomerulonephritis?

Certain types of infections confuse the immune system which then causes the immune system to irritate the kidneys. When the kidneys are irritated, some of the kidney filters (glomeruli) are damaged and they stop clearing waste products and extra water from the blood. Treating your child's infection **does not** prevent this type of kidney inflammation but some infections, your doctor may treat with antibiotics to prevent further spread. Scientists are not exactly sure why some infections cause this type of inflammation in the kidney but there is nothing that patients or families could have done to prevent this diagnosis.

What are the common signs & symptoms of Acute Post-Infectious Glomerulonephritis?

Dark red, brown or "Coca-Cola" colored urine is a common sign. This is due to blood in the urine. Sometimes the urine may appear normal but blood may still be seen in the urine with the aid of a microscope. Hypertension (high blood pressure) is another sign. Sometimes, it is the complications of high blood pressure such as headache, vomiting, dizziness or seizures that bring attention to the presence of acute post-infectious glomerulonephritis. Swelling of the face and feet may also occur because the kidney is not getting rid of extra water. Proteinuria (protein in the urine) can also occur, but this can only be detected by a urine test. Other common complaints are not feeling well and abdominal pain.

How is Acute Post-Infectious Glomerulonephritis diagnosed?

The presence of one or all of the following in a child suggests the diagnosis of APGN: dark colored urine, kidney failure, high blood pressure, body swelling and history of an infection in the recent past. To assist your doctor in confirming the diagnosis, a special blood tests to determine the level of a special blood protein called **complement 3 (C3)** are performed. A low C3 is highly suggestive of post-infectious glomerulonephritis.

How is Acute Post-Infectious Glomerulonephritis treated?

There is no specific treatment for the disease as it runs its course. Sometimes your doctor will need to treat your blood pressure or swelling with medications. **After 2-3 months**, the inflammation in your kidney caused by APGN should resolve. Once a child has APGN, this diagnosis rarely ever happens again.