What is glomerulonephritis (GN)?

GN presents with blood and protein in the urine and is often associated with high blood pressure and swelling. GN is caused by a number of disorders that are all characterized by injury to the filtering units (glomeruli) of the kidneys. In some cases, GN may progress to kidney failure.

What is the workup for GN?

A thorough evaluation includes assessing the child’s blood pressure, urine tests, and blood work.

A specific blood test will look for complement levels, specifically, C3 and C4.

There are three main causes of low C3 glomerulonephritis.

1. Post Infectious Glomerulonephritis (PIGN)
2. Lupus
3. Membranoproliferative glomerulonephritis (MPGN)

The doctor will explain lab results and how they relate to various conditions. If the child has GN with normal complement levels the doctor might biopsy (see handout on kidney biopsy) the kidney to look for other possible causes of GN.

What is post infectious glomerulonephritis (PIGN)?

PIGN can occur after any infection but classically occurs after a streptococcus infection. PIGN is most often found in children between the ages of five and seven years of age. PIGN is often self-limiting.

Within eight weeks, blood pressure, protein in the urine, renal insufficiency and complement typically return to normal. It is very important that blood pressure be monitored frequently during this time as the doctor might need to perform a kidney biopsy if signs and symptoms do not return to normal.