

Glomerulonephritis Assessment

Glomerulonephritis refers to a kidney disorder characterized by inflammation of the glomeruli. It is most often caused by an immunological reaction. Destruction, inflammation, and sclerosis of the glomeruli of the kidneys occur, which can impair kidney functioning. The most common cause of this disease process is from group A beta-hemolytic streptococcal infection of the skin, tonsils, or pharynx. Glomerulonephritis can be either acute (rapid onset of symptoms) or chronic (slower onset which may lead to irreversible renal failure). Symptoms may include generalized edema, hypertension, oliguria, hematuria, and proteinuria with lab results indicating an increase in BUN and creatinine.



PLAY PICMONIC

Mechanism

Group A Beta-Hemolytic Streptococcal Infection

(A) Apple Beta-fish Stripper

Acute poststreptococcal glomerulonephritis (APSGN) occurs 5 to 21 days after an infection of the skin, tonsils, or pharynx by nephrotoxic strains of group A beta-hemolytic streptococci (GABHS). This type of acute glomerulonephritis is most common in children and young adults.

Signs and Symptoms

Hypertension

Hiker-BP

An increase of fluid volume and accumulation of waste-byproduct in the bloodstream contributes to the incidence of hypertension.

Hematuria

Red-urinal

Hematuria with a smoky, "tea-colored" or rusty appearance is often present and results from loss of blood.

Proteinuria

Mr. Protein-in-Urine

Often described as increasingly "foamy" urine, the amount of proteinuria varies depending on the severity of the disease.

Oliguria

Old-gopher

Due to progressively worsening kidney function, the patient may manifest with oliguria or a low urine output.

Generalized Edema

General Edamame

Due to a decrease in glomerular filtration and loss of protein to the urine, intravascular fluid retention occurs and results in generalized edema. Peripheral and dependent locations, such as around the eyes (periorbital) or lower legs are common locations of mild to moderate generalized edema, though other locations (e.g intraabdominal, or ascites) can develop with worsening severity.

Increased BUN and CR

Up-arrow BUN and CR-eam

Building waste-products in the blood stream is measured through serum blood urea nitrogen (BUN) and creatinine levels.

Flank Pain

Flank Pain-bolt

Patients may experience abdominal or flank pain due to the location of the kidneys.