KIDNEY DISEASE—GLOMERULONEPHRITIS

Overview:

Glomerulonephritis refers to an inflammation of the glomeruli, the filtering units of the kidneys. An infection of glomeruli may lead cause damage to these sensitive filtering units, hampering the removal of waste products, salts, and water from the blood stream. Glomerulonephritis is the most common cause of *chronic renal insufficiency/failure* (loss of kidney functions).

Glomerulonephritis can have many causes. The immune system may be making antibodies to eliminate microorganisms, such as the bacteria responsible for minor infections, especially strep throat. Particles called immune complexes, formed from antibodies and bacterial antigens, begin to circulate in the blood stream and become trapped in the glomeruli. This can trigger an inflammatory process that can lead to damage of the glomeruli, decreasing kidney functions. Glomerulonephritis also occurs in certain *autoimmune disorders*, systemic *lupus*, and the immunoglobulin A (IgA) glomerulonephritis often referred to as *Berger's disease*.

Mild forms of glomerulonephritis may not produce any noticeable symptoms; thus mild forms of the condition are often discovered during either a routine physical, or as part of an insurance company exam. Urine studies may show red blood cells, a condition referred to as *hematuria*. Protein may also be found in the urine, a condition referred to as *proteinuria*.

Over time, or with a stronger bout of glomerulonephritis, renal insufficiency or failure often leads symptoms, including puffiness of the soft tissues around the eye ball (periorbital edema), elevated blood pressure, and/or a significant reduction in the passing of urine. All of these are due to decreased kidney functions that have caused an excess accumulation of waste products in the body. Glomerulonephritis can also manifest itself with a severe and sudden attack. Kidney failure can develop within a few days and is often noticed by the patient due to the very small volume of urine excreted. Emergency treatment to restore kidney functions may be required. A *kidney biopsy may be performed to* enable proper diagnosis of serious kidney ailments.

Impact on Life Underwriting:

Among the most common finding of insurance company laboratory testing are the findings of either protein or blood in the urine. Without known cause, these findings will lead most underwriters to request two additional urine specimen on "alternate" days (i.e. taken not on the same day). If these findings come back without additional evidence of abnormality, underwriting often proceed on an as applied for basis. If one or both additional studies come back positive, then, depending on the degree of the abnormal findings, a rated offer may be made. An offer may also be postponed pending further investigation by the proposed insured with their personal physician. If serious kidney disease is suspected, an workup by a specialist is almost always essential before an offer of insurance will be made.

Medical directors will underwrite glomerulonephritis based on whether it is acute or chronic, the rate of progression of any disease as reported in attending physician statements, as well as the actuarial experience in regard to morbidity and mortality for the particular kind of glomerulonephritis diagnosed.

Acute forms of glomerulonephritis that can rapidly progress to renal failure are typically postponed until the condition stabilizes.

Chronic forms of glomerulonephritis are underwritten based on the *documented* stability (or lack thereof) of the condition over years, as well as the result of various kidney function (and related) tests.

The following table will provide some insights into likely underwriting action for glomerulonephritis. SB 04/24/2001

Category of Glomerulonephritis	**Current**	**1 Yr Ago**	**2 Yrs Ago**	**3 Yrs Ago**	**4 Yrs Ago**	**5 Yrs Ago**	**6 Yrs +**
Acute glomerulonephritis	Postponed	Standard	Standard	Standard	Standard	Standard	Standard
Rapidly progressive glomerulonephritis	Postponed	Postponed	Postponed	Table 2	Table 2	Standard	Standard
Minimal Change Disease	Table 4	Table 2	Table 2	Table 2	Standard	Standard	Standard
Focal or segmental glomerulonephritis	Postponed	Postponed	Postponed	Table 8	Table 8	Table 8	Table 4
Membranous glomerulonephritis	Table 8	Table 8	Table 8	Table 4	Table 4	Table 4	Table 2
Membranoproliferative glomerulonephritis	Postponed	Postponed	Postponed	Table 6	Table 6	Table 6	Table 3
Berger's Disease	Table 2 +	Table 2 +	Table 2 +	Table 2 +	Table 2 +	Table 2 +	Table 2 +