

Some patients with inflammatory glomerular disease, such as acute poststreptococcal glomerulonephritis or MPGN, have *pyuria* characterized by the presence of considerable numbers of leukocytes. This latter finding has to be distinguished from urine infected with bacteria.

CLINICAL SYNDROMES

Various forms of glomerular injury can also be parsed into several distinct syndromes on clinical grounds (Table 338-2). These syndromes, however, are not always mutually exclusive. There is an *acute nephritic syndrome* producing 1–2 g/24 h of proteinuria,

TABLE 338-2 PATTERNS OF CLINICAL GLOMERULONEPHRITIS

Glomerular Syndromes	Proteinuria	Hematuria	Vascular Injury
Acute Nephritic Syndromes			
Poststreptococcal glomerulonephritis ^a	+ / ++	+ / +++	–
Subacute bacterial endocarditis ^a	+ / ++	++	–
Lupus nephritis ^a	+ / ++	+ / +++	+
Antiglomerular basement membrane disease ^a	++	+ / +++	–
IgA nephropathy ^a	+ / ++	+++ ^c	–
ANCA small-vessel vasculitis ^a			
Granulomatosis with polyangiitis (Wegener's)	+ / ++	+ / +++	++++
Microscopic polyangiitis	+ / ++	+ / +++	++++
Churg-Strauss syndrome	+ / ++	+ / +++	++++
Henoch-Schönlein purpura ^a	+ / ++	+ / +++	++++
Cryoglobulinemia ^a	+ / ++	+ / +++	++++
Membranoproliferative glomerulonephritis ^a	++	+ / +++	–
Mesangioproliferative glomerulonephritis	+	+ / ++	–
Pulmonary-Renal Syndromes			
Goodpasture's syndrome ^a	++	+ / +++	–
ANCA small-vessel vasculitis ^a			
Granulomatosis with polyangiitis (Wegener's)	+ / ++	+ / +++	++++
Microscopic polyangiitis	+ / ++	+ / +++	++++
Churg-Strauss syndrome	+ / ++	+ / +++	++++
Henoch-Schönlein purpura ^a	+ / ++	+ / +++	++++
Cryoglobulinemia ^a	+ / ++	+ / +++	++++
Nephrotic Syndromes			
Minimal change disease	++++	–	–
Focal segmental glomerulosclerosis	+++ / +++++	+	–
Membranous glomerulonephritis	++++	+	–
Diabetic nephropathy	++ / +++++	– / +	–
AL and AA amyloidosis	+++ / +++++	+	+ / ++
Light-chain deposition disease	+++	+	–
Fibrillary-immunotactoid disease	+++ / +++++	+	+
Fabry's disease	+	+	–
Basement Membrane Syndromes			
Anti-GBM disease ^a	++	+ / +++	–
Alport's syndrome	++	++	–
Thin basement membrane disease	+	++	–
Nail-patella syndrome	+ / +++	++	–
Glomerular Vascular Syndromes			
Atherosclerotic nephropathy	+	+	+++
Hypertensive nephropathy ^b	+ / ++	+ / ++	++
Cholesterol emboli	+ / ++	++	+++
Sickle cell disease	+ / ++	+++ ^c	+++
Thrombotic microangiopathies	++	++	+++
Antiphospholipid syndrome	++	++	+++
ANCA small-vessel vasculitis ^a			
Granulomatosis with polyangiitis (Wegener's)	+ / ++	+ / +++	++++
Microscopic polyangiitis	+ / ++	+ / +++	++++
Churg-Strauss syndrome	+++	+ / +++	++++
Henoch-Schönlein purpura ^a	+ / ++	+ / +++	++++
Cryoglobulinemia ^a	+ / ++	+ / +++	++++
AL and AA amyloidosis	+++ / +++++	+	+ / ++

(Continued)