KIDNEY BIOPSY TEACHING CASE
Cytomegalovirus Glomerulitis in a Renal Allograft
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Although up to two thirds of renal allograft recipients have evidence of either primary or reactivated cytomegalovirus (CMV) infection, a much lower proportion develops symptomatic disease.1,2 The classic site of renal damage is the tubulointerstitial compartment, with glomerular involvement occurring far less commonly.3-6 CMV glomerulitis has been considered a controversial entity, with some investigators showing an acute transplant glomerulopathy without associated CMV inclusions and others attributing glomerular damage to an antiendothelial cell reaction or a vasculocentric acute rejection.7-12 More recently, CMV glomerulitis was well documented in a few case reports.6,11,13 These patients usually showed endothelial swelling and necrosis, even associated with crescentic glomerulonephritis in 1 patient.14 The effects of CMV glomerulopathy are not well established, and temporal and pathological interrelationships with acute rejection still are unclear.2,15-20 Separating CMV-related tubulointerstitial nephritis from the tubulitis of acute cellular rejection can be problematic. Two biopsy specimens obtained during the acute phase from a single patient with CMV glomerulonephritis are described here to illustrate the natural history of the disease in the renal allograft. Acute cellular rejection and collapsing focal segmental glomerulosclerosis (FSGS) that developed 9 months to a year after the diagnosis of CMV glomerulitis are delineated in 2 subsequent biopsies.