GLOMERULAR ABNORMALITIES IN SARCOIDOSIS,

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Impairment of renal function in sarcoidosis is not uncommon and often presents in association to hypercalciuria, nephrocalcinosis and nephrolithiasis. The renal lesions have been divided into three categories: granulomatous involvement of the parenchyma, nephrocalcinosis, and glomerulonephritis (membranous and membranoproliferative). Glomerular lesions specifically ascribed to sarcoidosis have not been described. Six renal biopsies of patients with sarcoidosis were studied; half of the patients presented with hypercalcemia. In five biopsies there was granulomatous interstitial nephritis and variable degree of nephrocalcinosis, in one biopsy the predominant lesion was membranous nephropathy. Ultrastructural glomerular lesions were observed in the three biopsies of hypercalcemic patients, these consisted of numerous calcium spherules at various stages of formation in the mesangial matrix and glomerular basement membrane. These results suggest that renal impairment in sarcoidosis may not only be due to interstitial granulomatous nephritis, but to structural abnormalities caused by calcium deposition in the glomerular basement membrane.