

## **SYSTEMIC SARCOIDOSIS DIAGNOSED BY RENAL BIOPSY**

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We report a case of a patient who had systemic sarcoidosis diagnosed by renal biopsy. A 35 year old African American male with past medical history of Non-ischemic cardiomyopathy (NICM), s/p cardiac defibrillator (ICD) secondary to multiple episodes of ventricular tachycardia and chronic kidney disease presented to our hospital with ventricular tachycardia. He was loaded with amiodarone with which he converted to normal sinus rhythm. On admission he was noted to have creatinine of 2.3 mg/dl. He had a corrected calcium level of 12.1 and elevated alkaline phosphatase (ALP) of 1023 with normal bilirubin and transaminases. On review of his outpatient records work up of his chronic kidney disease revealed nephrotic range proteinuria and bilateral enlarged kidneys with increased echogenicity. His creatinine was 1.2 mg/dl, 6 months ago and 1.7 mg/dl, 2 months ago. A renal biopsy was done to rule out amyloidosis as the cause of CKD and NICM despite the fact that a renal ultrasound showed increased echogenicity of both kidneys. The renal biopsy showed diffuse acute interstitial nephritis with granulomas and eosinophils as well as mild diabetic nephropathy. At this point a diagnosis of sarcoidosis was established on the basis of renal biopsy, hypercalcemia and high ACE levels. Subsequently patient had a high resolution CT scan of thorax which showed diffuse ground glass opacities with septal thickening but no hilar or mediastinal lymphadenopathy. Given persistently elevated ALP patient had a liver biopsy as well which also showed features of sarcoidosis. Patient was started on 60 mg of prednisone. His renal and liver function improved in next few weeks to a creatinine of 1.2 mg/dl and he was discharged on slow steroid taper.

This case illustrates sarcoidosis as a cause of acute granulomatous interstitial nephritis (AIN) which responded to steroids therapy. This case also shows importance of renal biopsy in patients with unexplained renal failure despite increased echogenicity on renal ultrasound.