

UNUSUAL PRESENTATION OF FOCAL SEGMENTAL GLOMERULOSCLEROSIS WITH ACUTE RENAL FAILURE

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Acute tubular necrosis (ATN) is a rare and incompletely understood complication of the nephrotic syndrome, particularly minimal change disease, in adults and children. We report a case of a 56-year-old man with focal segmental glomerulosclerosis (FSGS) who presented with acute renal failure due to ATN. Physical exam revealed blood pressure of 130/80mmHg, pulse 81, respiratory rate 18, temperature 98F, and bilateral lower extremity edema. On admission his creatinine was 3.3mg/dL (baseline 0.8mg/dL), blood urea nitrogen 24mg/dL (baseline 5mg/dL), serum albumin 1.2mg/dL (baseline 3.8mg/dL), and urinalysis showed heavy proteinuria. Of note, the urinalysis 2 weeks prior to admission was normal. His creatinine peaked at 5.4mg/dL and quantification of urinary protein revealed 7.5gm/24hr. Serological studies for HIV and Hepatitis B and C were negative. Renal biopsy revealed focal segmental glomerulosclerosis and ATN. He was treated with methylprednisolone 1gm IV daily for 3 days followed by prednisone 1mg/kg per day. Within one week, his renal function slowly improved concomitant with resolution of the nephrotic range proteinuria.

Acute renal failure due to ATN is uncommon in the nephrotic syndrome, particularly FSGS, but can result from hypovolemia or drugs. This patient did not have any obvious precipitating factor for the acute reversible renal failure and had a normal urinalysis, urinary protein excretion, and albumin 2 weeks prior to admission. We propose that nephrotic syndrome presenting as ATN may be more common than previously described in the general population. Since the pathogenesis of ATN in the nephrotic syndrome has not been elucidated, further research is needed to determine the etiology of this presentation.