Conversion of asymptomatic quiescent IgA nephropathy presenting only isolated microscopic hematuria into rapidly progressive glomerulonephritis triggered by acute bacterial pyelonephritis

Eunjin Bae, Tae Won Lee, Hyun Seop Cho, Ha Nee Jang, Se-Ho Chang, Dong Jun Park
1Department of Internal Medicine-Nephrology, Gyeongsang National University Changwon Hospital, Korea, Republic of
2Department of Internal Medicine-Nephrology, Gyeongsang National University Hospital, Korea, Republic of

Case Study: Asymptomatic urinary abnormality (AUA) including isolated microscopic hematuria (IMH) is common clinical presentation in IgA nephropathy (IgAN) patients. The natural history of IgAN patients with IMH is not completely known. Otherwise, a rapidly progressive IgAN is uncommon, but it has been known that it has a high risk of end stage renal disease. We report a case of 35-year-old woman of conversion of asymptomatic quiescent IgA nephropathy presenting only isolated microscopic hematuria into rapidly progressive glomerulonephritis triggered by acute bacterial pyelonephritis. She initially visited our hospital due to fever, left flank pain and nausea starting just one day before. She has been diagnosed as AUA presenting IMH since 7 years before. Initial urine stick showed 1.02 of specific gravity, three positive protein, four positive blood, and two positive WBC. Spot urine protein creatinine ratio was 7.2. Urine culture revealed enterococcus faecalis. Intravenous ceftriaxone was used for control urinary infection. Serum creatinine level increased from initial 1.80 mg/dL to 2.62 mg/dL. Renal biopsy revealed numerous neutrophils in the interstitium and tubules and crescents and mesangial cell proliferation. C3 and IgA was positive in IF. EM revealed multifocal mesangial deposits and foot process effacement. Consecutive 500mg of methyl prednisolone was intravenously administrated during 3 day followed by 50mg of prednisolone per day. She is following to outpatient clinic without proteinuria and with normal renal function. Physician keep in mind that APN might be trigger factor of quiescent IgA nephropathy into rapidly progressive one