KSN 2021
FULLY VIRTUAL MEETING
September 02 (Thu) - 05 (Sun)

Abstract Submission No. : 2036

Remission of hematuria is associated with favorable prognosis in IgA nephropathy

Kyung Ho Lee, Young Seung Oh, Moo Yong Park, Soo Jeong Choi, Jin Kuk Kim, Seung Duk Hwang, Byung Chul Yu
Department of Internal Medicine-Nephrology, Soonchunhyang University Bucheon Hospital, Korea, Republic of

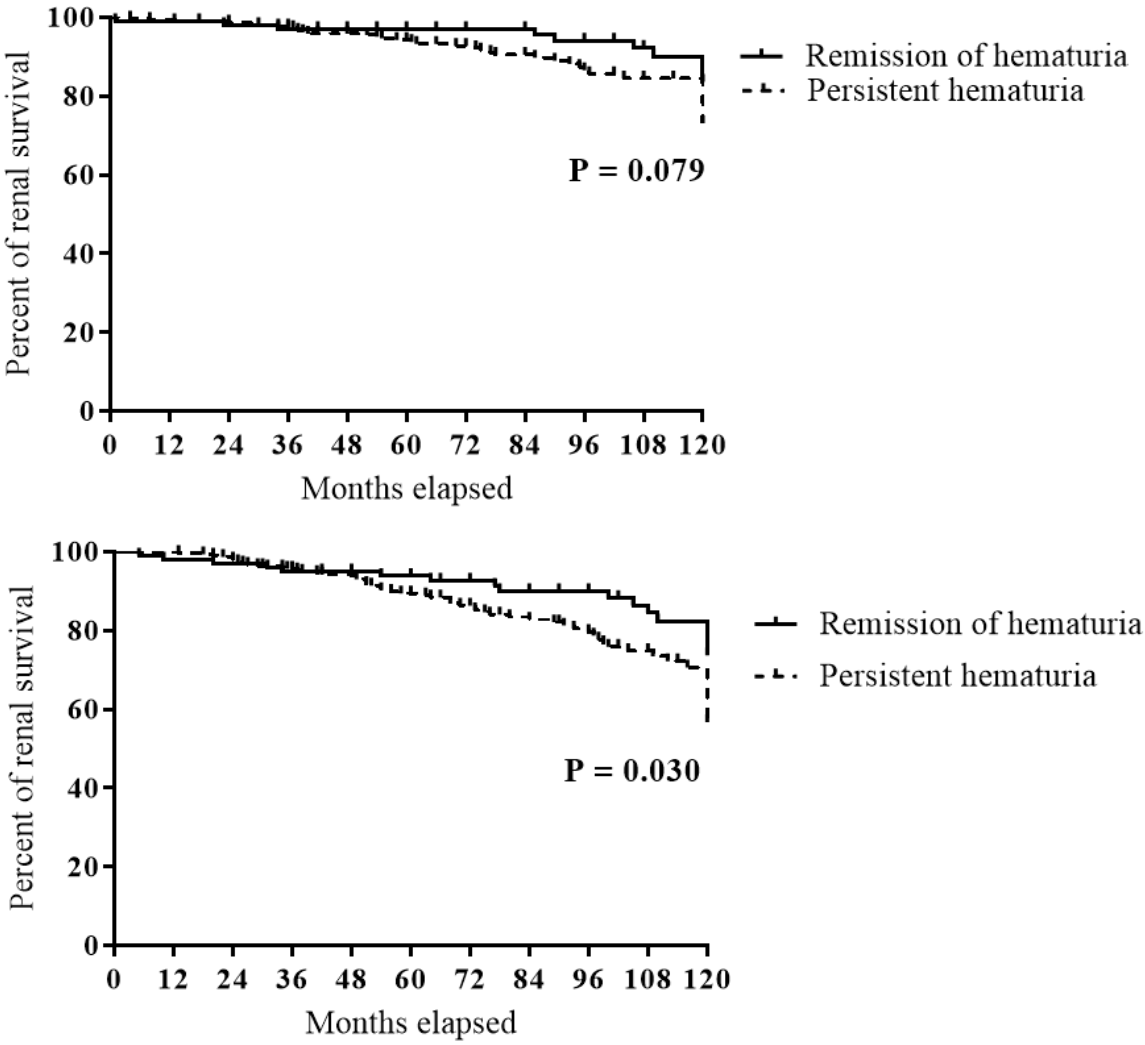
Objectives: Recent studies have shown that remission of hematuria is associated with favorable clinical outcomes in patients with immunoglobulin A nephropathy (IgAN). The current study was conducted to compare the long-term clinical outcomes between patients with remission of hematuria and those with persistent hematuria using the stricter definition of "remission of hematuria" than that used in previous studies.

Methods: This retrospective, multicenter, observational study was conducted using a cohort of patients diagnosed with IgAN through kidney biopsy at three tertiary hospitals. A total of 403 patients who underwent regular check-ups at intervals of at least 6 months were enrolled. Hematuria remission was defined as the presence of hematuria for at least 3 months after biopsy for diagnosis but with no RBC per high-power field observed in the urine under the microscope for at least 2 years thereafter.

Results: The mean annual rate of eGFR decline was lower in the remission of hematuria group than in the persistent hematuria group (-1.51 ± 2.86 vs. -2.60 ± 3.18 mL/min/1.73 m^2/year, p = 0.002). In the remission of hematuria group, the mean annual rate of eGFR decline decreased after hematuria disappearance (from -1.28 ± 7.06 to 0.09 ± 0.29 mL/min/1.73 m^2/year, p = 0.016). Multivariable analysis revealed remission of hematuria as an independent predictor of a 50% reduction in kidney function (HR, 0.55; 95% CI, 0.33 to 0.99). Renal survival, defined as a 50% reduction in kidney function, was better in the remission of hematuria group than in the persistent hematuria group (p = 0.030). When renal survival was defined by the absence of ESRD, it was not significantly different between the two groups (p = 0.079).

Conclusions: In this study, which used the stricter definition of hematuria remission than that used in previous studies, patients with remission of hematuria showed favorable kidney prognosis.

Renal survival according to remission of hematuria. (A: free of end-stage renal disease, B: free of 50% reduction of renal function)



Comparison of long-term clinical outcomes between the remission of hematuria and persistent hematuria group

Variable	Remission of hematuria (n = 100)	Persistent hematuria (*n* = 303)	*p*-value
Mean follow-up duration (years)	8.01 ± 2.31	6.68 ± 2.38	<0.001
Time-averaged proteinuria, g/d	598.86 ± 1048	694.26 ± 834.1	0.354
Mean annual rate of eGFR decline (mL/min/1.73 m^2/year)	-1.51 ± 2.86	-2.60 ± 3.18	0.002
50% Reduction in kidney function, no. (%)	17 (17.0)	62 (20.5)	0.45
ESRD, no. (%)	10 (10.0)	37 (12.2)	0.559