

## IgA신장병증의 진행의 예측 인자로써의 고요산 혈증

순천향대학교 천안병원 신장내과

김수지 · 석수진 · 김정훈 · 길효욱 · 양종오 · 이은영 · 홍세용

### Hyperuricemia as a Marker for Progression of IgA Nephropathy

Su Ji Kim, Su-Jin Seok, Jung-Hoon Kim, Hyo-Wook Gil, Jong-Oh Yang, Eun-Young Lee, Sae-Yong Hong

Soonchunhyang University Cheonan Hospital Department of Internal Medicine, Division of Nephrology

**Background:** Because of variable clinical and histopathological manifestation of Immunoglobulin A nephropathy (IgAN), it is very difficult to predict the disease progression. In recent study, hyperuricemia which is common in hypertension and vascular disease has also been thought to contribute to the renal dysfunction and the histological changes, including renal arteriole sclerosis, tubular atrophy and interstitial fibrosis. In present study we investigated the clinical significance of uric acid level at the time of biopsy as a marker for the progression of IgAN.

**Methods:** A total 193 patients (men 103, women 90, range 14 to 71 years) with biopsy proven IgAN were studied. The patients were followed up for 0.2 to 10 years. Progression of renal disease defined as elevation of serum creatinine above 1.2 mg/dL or over 20% elevation from baseline. Hyperuricemia defined as a level of serum uric acid  $\geq 7.3$  mg/dL in men or  $\geq 5.3$  mg/dL in women according to the consensus from our hospital, upper level of one standard deviation of normal control group. The control group consisted of 6,245 participants, who were clinically well and without hypertension, diabetes, hematuria and proteinuria at SCH health promotion center.

**Results:** The hyperuricemia group (n=50) showed higher systolic blood pressure, body mass index, serum creatinine, total cholesterol, triglycerides, a greater amount of proteinuria and lower glomerular filtration rate than normal hyperuricemia group (n=143). Hyperuricemia increased risk for progression of IgAN (OR 4.53, 95% CI 1.31–15.66) after adjusted for age, gender, body mass index, hypertriglyceridemia, hypercholesterolemia and proteinuria. The disease progression group (n=26) had a greater frequency of hyperuricemia, hypertension, proteinuria and the nephrotic range of proteinuria than non progression group (n=119). The survival rate curves for stable renal function in relation to hyperuricemia showed that the hyperuricemia group had a higher rate of disease progression in IgAN.

**Conclusion:** We conclude that hyperuricemia at the time of diagnosis is important marker for progression of IgAN.

**Key Words:** IgA신병증, 고요산혈증

Immunoglobulin A nephropathy, Hyperuricemia