

## IgA 신증 여자환자에서 임신전 단백뇨 감소시 출산후 신기능 악화 예방과의 관련성

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오형중, 김승준, 유동은, 신동호, 이미정, 김은진, 구향모  
도화미, 박정탁, 한승혁, 유태현, 강신욱, 최규현

### Reduced Pre-Pregnancy Proteinuria Associated with Improving Postnatal Maternal Renal Outcomes in IgA Nephropathic Women

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**Aims:** In patients with immunoglobulin A (IgA) nephropathy, postnatal renal outcomes vary depending on kidney function and proteinuria. However, whether a decrease in proteinuria prior to conception improves postnatal maternal renal outcomes is unknown.

**Methods:** This was a single-center retrospective study. A total of 52 pregnant women with biopsy-proven IgA nephropathy were enrolled in the study between January 2004 and December 2009. We collected data on proteinuria, which had been measured 1 year prior to conception, during pregnancy, and postnatally. The study outcomes included changes in estimated glomerular filtration rate (eGFR) and proteinuria.

**Results:** The median serum creatinine, eGFR, and proteinuria levels at conception were 0.8 (0.5–2.6) mg/dL, 86.0 (22.4–157) ml/min/1.73m<sup>2</sup>, and 0.7 (0.0–3.5) mg/mg, respectively. Compared with values measured at pre-conception, serum creatinine (0.8 to 1.0 mg/dL,  $p<0.01$ ) and proteinuria (0.7 to 1.5 mg/mg,  $p<0.01$ ) increased significantly postnatally, while eGFR decreased (86.2 to 71.5 ml/min/1.73m<sup>2</sup>,  $p<0.01$ ). In a multiple linear regression analysis, pre-conception proteinuria values appeared to be independently associated with a faster decline in postnatal maternal eGFR ( $\beta=4.29$ ,  $p<0.05$ ). In addition, a less rapid decline in maternal eGFR was observed in patients with significant reductions in proteinuria prior to pregnancy, compared with those with less substantial reductions.

**Conclusion:** This study shows that in women with IgA nephropathy, proteinuria values are significantly associated with the deterioration of postnatal maternal renal outcomes. Our study also suggests that a strategy for reducing proteinuria prior to pregnancy should be required to preserve kidney function after delivery.

**Key Words:** IgA 신증, 임신, 단백뇨, 신기능 악화

IgA nephropathy, Pregnancy, Proteinuria, Renal dysfunction