

## 2003 개정 루푸스 신염의 분류에 따른 싸이클로포스파마이드 정주요법에 대한 증식성 루푸스 신염의 반응

울산대학교 의과대학 서울아산병원 신장내과

김현우 · 조영미 · 장재원 · 양원석 · 김순배 · 이상구 · 박정식 · 박수길

### The Response of Proliferative Lupus Nephritis Treated with Intravenous Cyclophosphamide According to the ISN/RPS 2003 Classification of Lupus Nephritis

Kim Hyun Wo, Yong-Mee Cho, Jai Won Chang, Won Seok Yang  
Soon Bae Kim, Sang Koo Lee, Jung Sik Park, Su-Kil Park

University of Ulsan college of Medicine, Asan Medical Center, Department of Internal Medicine, Division of Nephrology

**Purpose** : To evaluate the therapeutic effect of intravenous (i.v.) cyclophosphamide (CYC) according to the new International Society of Nephrology/Renal Pathology Society (ISN/RPS) 2003 classification of lupus nephritis (LN), and to determine prognostic indicators in proliferative LN in Korean patients.

**Methods** : We reviewed retrospectively 78 patients with biopsy-proven proliferative LN (71 women, 7 men; mean  $\pm$  SD age at the renal biopsy  $34.0 \pm 11.2$  years; mean SLE duration  $25.5 \pm 32.4$  months) who treated with i.v. CYC between the years of 1997 and 2005. We classified renal pathology according to the new ISN/RPS classification of LN, and analyzed renal response rate of i.v. CYC and prognostic indicators of renal remission.

**Results** : Thirty-four patients (44%) had focal proliferative nephritis (class III), thirty-two patients (41%) had diffuse global proliferative nephritis (class IV-G), and twelve patients (15%) had diffuse segmental proliferative nephritis (class IV-S). Patients were followed for a mean of 44 months (6-123 months) after renal biopsy. 70 (90%) of the 78 patients received maintenance i.v. CYC (mean  $5.7 \pm 4.0$  times) after sixth dose of monthly i.v. CYC. At the last dose of CYC treatment, 31 (44%) had complete remission, 14 (20%) had partial remission, and 25 (36%) had no response. Patients with class IV-G LN showed a tendency to less treatment response to i.v. CYC at the last dose than those with class IV-S or III LN, but the differences were not statistically significant ( $P=0.093$ ). In a logistic regression analysis, good renal response to i.v. CYC at 6 months and low histologic chronicity score predicted good renal response at the last dose of i.v. CYC.

**Conclusion** : In our experience no significant difference was detected among patients with class III, class IV-G, class IV-S LN after treatment with i.v. CYC, and initial 6 months treatment response to CYC and low chronicity score were associated with good renal response.