

Cyclosporine Versus Cyclophosphamide Therapy in Idiopathic MGN

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Background: Although membranous glomerulonephritis (MGN) remains the most common cause of adult-onset nephrotic syndrome, the therapeutic approach of MGN is controversial. Cyclosporine (CyA) has been shown to be effective in MGN, it is, however, not widely used because of nephrotoxicity. In this study, we assessed the efficacy of CyA compared to that of cyclophosphamide in MGN patients.

Method: We reviewed 27 cases of idiopathic MGN patients (initial serum Cr ≤ 1.3 mg/dL) retrospectively. Baseline clinico-demographic data including age, sex, pathologic stage, initial BP, initial serum albumin level, initial serum cholesterol level, initial serum Cr level, initial GFR, and initial proteinuria was reviewed. We evaluated the treatment outcome of low-dose CyA (3-3.5 mg/kg; n=15) or cyclophosphamide (100-150 mg/day; n=12) plus low dose steroid (prednisolone, 5-15 mg/day).

Results: The baseline clinico-demographic characteristics of the two groups were not significantly different ($p > 0.05$). During follow-up period, both groups showed significant reduction of urine PCR (CyA ; initial 6.2 ± 2.9 , 2.7 ± 1.9 at 2 months, 1.8 ± 1.4 at 6 months, and 1.1 ± 0.8 at 12 months, cyclophosphamide; initial 6.7 ± 2.8 , 2.8 ± 2.5 at 2 months, 1.9 ± 2.4 at 6 months, 1.2 ± 1.0 at 12 months), which was not significantly different between two groups.

The pretreatment and posttreatment eGFR were not significantly different between two groups (97.57 ± 17.32 and 97.7 ± 26.08 mL/min/1.73m² in CyA, and 97.7 ± 26.08 and 105.86 ± 29.84 mL/min/1.73m² in cyclophosphamide, respectively). The adverse events such as infection and GI trouble were observed in 6 patients in CyA group and 5 patients in cyclophosphamide group.

Conclusion: Our results suggest that the effect of CyA is comparable to cyclophosphamide in adult IMN patients. Long-term prospective studies are needed.

Key Words: Cyclosporin, Cyclophosphamide, MGN