## CYCLOSPORIN A TREATMENT OF STEROID-RESISTANT MASSIVE PROTEINURIA DUE TO CLASS V LUPUS NEPHRITIS

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<u>AIMS</u>: The effect of cyclosporin A (CsA) treatment on proteinuria due to class V lupus nephritis (LN) is uncertain. We encountered three adult patients with steroid-resistant massive proteinuria due to class V LN treated with CsA. We want to report the clinical course of these patients and consider the indication of CsA to LN of this type.

<u>METHODS</u>: CsA was given orally once before breakfast daily at 5.0 mg/kg/day to three patients with steroid-resistant proteinuria, and then adjusted to maintain a blood trough level of 100 ng/mL.

RESULTS: The ages of the patients were 43 (patient 1), 27 (patient 2), and 33 (patient 3) years. There was one male (patient 2) and two females. We performed renal biopsy on all of them at admission and they were all diagnosed as class V LN. At first they were all treated with oral steroid, prednisolone (PSL) 1.0-1.2 mg/kg/day at least for 4 weeks. The degree of urine protein (U-Pro) before PSL treatment was 2520 mg/day, 2506 mg/day and 3577 mg/day, respectively. However, U-Pro did not significantly decrease after PSL administration and we tapered it within 1-4 months. The U-Pro of each patient at the start of CsA administration was 4885 mg/day, 2524 mg/day, and 2555mg/day. CsA was given to them and U-Pro gradually decreased in all. Patient 1 and 2 achieved complete remission (CR) after 10 months and 5 months of treatment with CsA, respectively. Patient 3 achieved incomplete remission after 6 months of CsA administration. Only patient 1 showed mild renal dysfunction.

<u>CONCLUSIONS</u>: Based on our experience, CsA appears to be an effective drug for patients with steroid-resistant massive proteinuia due to class V lupus nephritis. However, whether CsA can suppress U-Pro for a long time or not is controversial.

**Keyword**: Lupus nephritis, Nephrotic syndrome, Cyclosporin A