Abstract

Key words: anti-mCRP antibodies, cyclophosphamide, cyclosporine A, lupus nephritis, systemic lupus erythematosus

Systemic lupus erythematosus (SLE) is a systemic autoimmune disease. Circulating autoantibodies against the bodyôs own nuclear and cytoplasmic structures and creation of immune complexes play a key role in the pathogenesis of SLE. Antibodies against monomeric C-reactive protein (anti-mCRP) might play role in pathogenesis of lupus nephritis (LN). The aim of this study was to find relation between anti-mCRP and activity of LN and response to therapy.

Methods: The study was performed on 57 patients (M/F 0.21, median age 32 years) with LN. In a subanalysis, we focused on 29 patients with newly diagnosed active LN and we followed them up for a median of 5.9 years. Levels of anti-CRP were measured by in house ELISA. Disease activity was measured by SLEDAI.

Results: Levels of anti-mCRP were significantly higher in patients with active lupus nephritis (26.78 versus 7.5 AU, p=0.009) and levels of anti-mCRP positively correlated with the activity of SLE as assessed by the SLEDAI score (Spearmanôs r=0.406, p= 0.002). We found negative prediction of anti-mCRP for worse outcome after two years of standard therapy, OR (95% CI)=13.7 (1.22-770.87); p=0.014.

Conclusion: Serum levels of anti-mCRP seem to be a useful laboratory marker of LN/SLE activity and a predictor of worse outcome after standard treatment.

In the second part, we compared treatment with cyclophosphamide (CYC) to Cyclosporine A (CyA) in proliferative LN.

Methods: Forty patients (M/F 0,38, mean age 29 years) with clinically active proliferative LN were randomly assigned to one of two sequential induction and maintenance treatment regimens based either on CYC or CyA. The primary outcomes were complete renal remission or response at the end of induction phase maintenance phase.

Results: In this clinical study comparing two sequential therapies there was no difference between the groups in reaching remission or response to therapy. CyA was associated with a reversible increase in blood pressure and decrease in glomerular filtration rate.

Conclusion: CyA was as effective as CYC in the induction and maintenance treatment in patients with proliferative lupus nephritis.