MON-052 MULTITARGET THERAPY AS RESCUE INDUCTION THERAPY IN PROLIFERATIVE LUPUS NEPHRITIS: A SINGLE CENTRE EXPERIENCE IN 10 YEARS

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Introduction: Involvement of kidney in systemic lupus erythematosus has known to give major impact on the course of disease. Despite the advancement of treatment of lupus nephritis (LN), significant proportion of patients who are unresponsive to standard treatment. Optimizing treatment of LN remains important to reduce the morbidity and mortality of patients especially the survival disadvantage associated with chronic kidney disease and the side effects of the treatments. This study is conducted to recognize the response in using multi-target therapy (Mycothenolic acid (MPA) and tacrolimus combination) as a rescue treatment for proliferative lupus nephritis and identifying factors that may affect the outcome of treatment in this group of patients.

Methods: A 10 years retrospective analysis of all patients diagnosed with proliferative lupus nephritis and/or membranous lupus nephritis whom relapse after failing conventional therapy and started on multi-target therapy as rescue induction therapy. Patients were identified from the Hospital Lupus Nephritis database. Demographic, clinical and laboratory data and outcome were obtained from patients’ electronic medical records in the total hospital information system (Cerner Millennium®).

Results: 56 patients were identified from 1st January 2008 till 30th April 2018 but only 49 patients were included. 7 were lost to follow up and had inadequate data. Female predominated the cohort by 85.7% (n=42) and the mean age was 32.61 ± 7.63 year. 93.9% had received both Intravenous (IV) Cyclophosphamide and Mycophenolate Acid (MPA) as induction therapies before starting multi-target therapy. The remainder (6.1%) only used MPA as induction therapy as intolerant to IV cyclophosphamide. All patients had renal biopsy before starting multi-target therapy and 4 groups identified were Class III (2%), Class III and V (12%), Class IV (33%) and finally Class IV and V (53%). Mean equivalent MPA dosage was 1530 ± 504 mg/day. 86% went into remission with 51% and 35% into complete remission and partial remission respectively. 14%(n=7) did not respond to treatment. Mean time to achieve remission (partial and complete) was 12 ± 6.81 months and mean time duration of treatment before converting to maintenance therapy was 18 ± 12 months. Higher tacrolimus level was associated with better remission rate, p = 0.028. The mean tacrolimus level was 5.66 ± 0.98 ng/ml for complete remission (CR), 4.55 ± 2.02 ng/ml in partial remission (PR) and 4.26 ± 0.90 ng/ml in whom did not respond to therapy (NR). Higher serum creatinine level pretreatment was associated with lower response rate, p=0.002. The mean pretreatment serum creatinine level was 99.48 ± 63.54 µmol/L for CR, 149.69 ± 147.45 µmol/L for PR and 421.8 ± 293.16 µmol/L for NR. MPA dosage, class of LN, pretreatment serum albumin and 24-hour urine protein value and gender had no statistic significant in outcome of treatment. The mean level of tacrolimus in each group was not statistically significant with infection, gastrointestinal and haematological complications.

Conclusions: Multi-target therapy can be used as rescue induction therapy in patients with proliferative or and membranous LN patients whom relapse with conventional induction therapy. However, higher tacrolimus level required for better response rate without much complications.

MON-053 CLINICAL AND PATHOLOGICAL CHARACTERISTICS OF IGA NEPHROPATHY WITH AKD

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Introduction: IgA nephropathy is one of the most common types of primary glomerulonephritis worldwide. It was found that the creatinine of IgA nephropathy could increase in a short time even reaching the diagnostic standard of acute kidney disease (AKD) in clinical work. However, the factors for the occurrence in these patients were unclear. Here, we did a research to explore the clinical features and kidney pathological characteristics of IgA nephropathy patients with AKD and the related factors influencing its recovery.

Methods: Patients between 2011 and 2016 taken from the First Affiliated Hospital of Zhengzhou University were enrolled in the study. The number of renal glomeruli in all cases was more than or equal to 10. The secondary IgA nephropathy such as systemic lupus erythematosus, purpura nephritis, chronic liver diseases was not included. The 2012 KDIGO guidelines were adopted as the criteria to screen the IgA nephropathy patients with AKD. The baseline data, clinical and renal pathological data were collected. According to the degree of the decline of estimated glomerular filtration rate (eGFR), the IgA nephropathy patients with AKD were divided into three groups with the recovery degree of the renal function, the patients were divided into two groups with the recovery group (fully recovery of renal function or partial recovery) and the non-recovery group (no obvious change of renal function or progression of renal function). The clinical features and kidney pathological characteristics of the three groups and the related factors affecting their recoveries were analyzed.

Results: A total of 1855 patients were included of which 128 patients occurred to AKD, accounting for 6.9%. There were significant differences in calcium, phosphorus, hemoglobin, albumin, urea nitrogen and urine uric acid in the three groups (p < 0.05). We followed up the IgA nephropathy patients with AKD for 6 months and found that the creatinine level of 26 patients was not better or even progressed compared with the peak of creatinine during hospitalization, while the creatinine level of 102 patients was lower or completely restored to the baseline. High blood pressure and large amount of proteinuria are the factors that affect the recovery of renal function of AKD. At the same time, we take these patients for a long-term follow-up with the average follow-up time to 3.8 years with the result that 35 patients entered end-stage renal disease (ESRD) or died.

Conclusions: The degree of decreased glomerular filtration rate in IgA nephropathy patients with AKD is related to clinical and pathological characteristics and IgA nephropathy patients occurred with AKD are more likely to enter the ESRD.

MON-054 CLINICOPATHOLOGICAL FEATURES AND PROGNOSIS ANALYSIS OF 49 CASES WITH CRESCENTIC GLOMERULONEPHRITIS

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Introduction: Rapidly progressive glomerulonephritis (RPGN), involving rapid loss of renal function caused by aggressive nephritis, is associated with crescentic glomerulonephritis (CrGN). In this study, we retrospectively analyzed data from patients with CrGN to characterize the clinicopathological features and prognosis at a tertiary medical center of China.

Methods: Patients with renal biopsies diagnosed as CrGN between 2011 and 2016 were recruited from a single center. The biopsies included patients with renal biopsies diagnosed as CrGN between 2011 and 2016 were recruited from a single center. The biopsies included patients with renal biopsies diagnosed as CrGN between 2011 and 2016 were recruited from a single center. The biopsies included patients with renal biopsies diagnosed as CrGN between 2011 and 2016 were recruited from a single center.

Results: 49 individuals were proved to be CrGN. Of these, 11 (22.45%) patients were classified as type I, 19 (38.78%) as type II and the rest 19 (38.78%) as type III. Multiple-system involvement could be seen in most CrGN patients, and 28 (57.14%) cases of kidney enlargement were showed in ultrasonography. The percentage of patients with AKI, AKD without AKI, and CKD were 11 (22.45%), 19 (38.78%) and 26 (53.06%), respectively. Compared with the other two types, patients with type I tended to have a higher proportion of AKI with more cellular crescents formation. Higher serum