THE EFFECT OF HISTOPATHOLOGICAL CLASSIFICATION ON PROGNOSIS IN ANCA-ASSOCIATED VASCULITIS – SINGLE CENTRAL EXPERIENCE

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Introduction and Aim: Histopathological classification of ANCA-associated vasculitis was first described in 2010. In this classification, renal biopsy glomerular findings (normal, sclerotic and crescentic) and percentages are evaluated. Accordingly, four groups were defined as focal, crescentic, sclerotic and mixed. Histopathological classification and normal glomerulus percentage were also found to be related to prognosis in the studies performed. The aim of this study is to evaluate the prognostic effect of histopathological classification and normal glomerulus percentage in cases of ANCA-associated vasculitis of kidney biopsy in our center.

Methods: This retrospective study included ANCA-associated vasculitis patients who underwent renal biopsy at our center between 2004 to 2016. Among 965 renal biopsy specimens performed at our center, 44 ANCA associated crescentic glomerulonephritis case were included. Histopathological classification was made according to glomerular findings in biopsy materials. Normal glomerulus percentage was calculated. Prognostic effect of histopathological classification and normal glomerulus percentage (remission, end stage renal disease, death) were evaluated.

Results: Average age were similar between groups. 16 patient were c-ANCA positive, 23 patients were p-ANCA positive and only 5 patients were ANCA negative. The histopathological classification of renal biopsies revealed 31.8% (n:14) focal, 25% (n:11) crescentic, 22.7% (n:10) sclerotic and 20.5% (n:9) mix group. There was no significant effect of histopathological classification on 6th month treatment responses (p:0,433). All patients received intravenous cylophosphamide and steroid based treatment. Significant effect of normal glomerulus percentage on 6th month treatment responses was found (p:0,001). The percentage of normal glomerulus was found to be higher in patients with remission compared to end stage renal disease (ESRD) and the case that resulted in death.

	Remission	ESRD	Death
Focal	10 (%71,4)	2 (%14,3)	2 (%14,3)
Cresentic	6 (%54,5)	4 (%36,4)	1 (%9,1)
Sclerotic	4 (%40)	5 (%50)	1 (%10)
Mix	4 (%44,4)	3 (%33,3)	2 (%22,2)

Conclusion: Contrary to previous studies, in our small cohort, we could not find any effect of histopathologic classification on outcome. This result probably due to the inadequate number of patients. As in previous studies, the percentage of normal glomerulus in our study was correlated with the treatment response. Multicenter trials may enlighten the importance of histopathologic classification in Turkish population.

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