

IgA nephropathy and thrombotic microangiopathy; a summary of our previous report from Iran



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Key point

The histopathological findings in our 102 patients with IgA nephropathy in 2012, showed lesions of thrombotic microangiopathy in 2% of our patients.

Keywords: IgA nephropathy, Extracapillary proliferation, Serum creatinine, Thrombotic microangiopathy

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To Editor,

The Oxford-MEST classification is a system conducted to classify the histopathological features of IgA nephropathy (IgAN) based on five variables of mesangial hypercellularity, endocapillary hypercellularity, segmental glomerulosclerosis, and tubular atrophy/interstitial fibrosis across with extracapillary proliferation (1). Mesangial hypercellularity refers to the proliferation of mesangial cells and matrix in the glomeruli. Endocapillary hypercellularity refers to the proliferation of cells within the capillary loops of the glomeruli. Segmental glomerulosclerosis refers to the scarring of certain segments of the glomeruli. Tubular atrophy/interstitial fibrosis refers to the damage and scarring of the tubules and interstitium in the kidney (1-3). To assess the range of histopathological findings in patients with IgAN (IgA nephropathy), we previously conducted an observational study on a group of IgAN patients using the Oxford-MEST classification system. This study was conducted on renal biopsy-proven IgA nephropathy from July 2009 to February 2012. This study showed, out of 102 patients, 71.6% were male and the mean age was 37.7 ± 13.6 years. The majority of patients (90.2%) had M1 morphology according to the MEST classification, while 32% had E and 67% had S morphology. Moreover, T grades of one and two were observed in 30% and 19% of patients, respectively, while 51% having a grade of zero. A significant difference was found between males and females in the frequency distribution of segmental glomerulosclerosis ($P=0.003$)

and interstitial fibrosis/tubular atrophy ($P=0.045$). We also found mesangial hypercellularity was more common in younger patients. Meanwhile, serum creatinine levels were significantly correlated with crescents ($P<0.001$) and segmental glomerulosclerosis ($P<0.001$). Our results showed a higher prevalence of segmental glomerulosclerosis and interstitial fibrosis/tubular atrophy in male patients, indicating that male gender is a risk factor for this disease. Additionally, the significant correlation between serum creatinine and crescent was consistent with previous studies, suggesting that extracapillary proliferation should be considered as a new variable in the MEST system (1). We notably detected lesions of thrombotic microangiopathy in 2% of our patients. In summary, this study provides valuable insights into the histopathological findings of IgAN in Iran and the Middle East. The higher prevalence of certain variables in male patients highlights the importance of gender as a risk factor for this disease. Additionally, the correlation between serum creatinine and extracapillary proliferation suggests that this variable should be considered in the MEST system. These findings can aid in the diagnosis and management of IgAN in this region and contribute to a better understanding of the disease worldwide.

Conflicts of interest

The author declares that he has no competing interests.

Ethical issues

Ethical issues (including plagiarism, data fabrication,

and double publication) have been completely observed by the author.

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