



# PREDICTORS OF RENAL SURVIVAL IN PATIENTS WITH IDIOPATHIC MEMBRANOUS NEPHROPATHY



Ali R. Ucar<sup>1</sup>, Ozan Yegit<sup>2</sup>, Egemen Cebeci<sup>3</sup>, Abdulmecit Yildiz<sup>4</sup>, Safak Mirioglu<sup>2</sup>, Erol Demir<sup>1</sup>, Savas Ozturk<sup>3</sup>, Aydin Turkmen<sup>1</sup>, Yasar Caliskan<sup>1</sup>

<sup>1</sup> Istanbul University, Istanbul Faculty of Medicine, Department of Internal Medicine, Division of Nephrology, Istanbul, TURKEY,

<sup>2</sup> Istanbul University, Istanbul Faculty of Medicine, Department of Internal Medicine, Istanbul, TURKEY,

<sup>3</sup> Haseki Training and Research Hospital, Nephrology Clinic, Istanbul, TURKEY,

<sup>4</sup> Uludag University Faculty of Medicine, Department of Internal Medicine, Division of Nephrology, Bursa, TURKEY

## INTRODUCTION AND AIMS

Idiopathic membranous nephropathy (IMN) is a common cause of the nephrotic syndrome in adults. In this multicenter study, we aim to assess the relationship between histopathological, clinical, and laboratory findings in patients with IMN.

## METHODS

Two hundred and eighty-one IMN patients [59.8% male, mean age 45±15 years] from four nephrology clinics were enrolled. The impact of histopathological lesions (glomerular sclerosis, crescents, intensity and pattern of staining for C3 and IgG) and clinical markers [age, gender, systolic and diastolic blood pressure (BP), estimated glomerular filtration rate (eGFR), serum creatinine, hemoglobin (Hgb), albumin, proteinuria, anti-PLA2R antibody] on composite renal outcome [defined as development of end stage renal disease (ESRD) or a >50% decrease in eGFR as compared to baseline levels] were assessed using Cox regression analysis.

## RESULTS

Mean levels of systolic and diastolic BP, serum creatinine, albumin, and proteinuria at the time of diagnosis were 130±18 mmHg, 81±11 mmHg, 1.00±0.77 mg/dL, 2.72±0.77 g/dL and 6.20±3.95 g/day, respectively. Composite renal outcome developed in 33 (11.7%) and ESRD developed in 15 (5.3%) patients after a median of 33.5 (IQR: 14-66.6) months. In Cox regression analysis, histological lesions were not associated with progression of IMN. However, systolic BP (B: 1.087, p=0.038), Hgb (B: 0.438, p=0.047) and eGFR (B: 0.917, p=0.011) levels at baseline predicted composite renal outcome.

## CONCLUSIONS

Our study shows that progression of IMN and development of ESRD are associated with the presence of clinical risk factors, in particular systolic BP, impaired kidney function and anemia at the time of diagnosis.

