

Abstract Submission No.: A-0912**Moderate-severe intrarenal arteriosclerosis may influence the cardiac-renal prognosis of IgAN patients**

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Objectives : The cardiovascular risk among patients with IgA nephropathy (IgAN) is gradually garnering increased attention. The aim of this study was to investigate the risk factors affecting cardiac-renal prognosis in patients with IgAN.

Methods : This is a retrospective study. A total of 353 IgAN patients with regular follow-up for at least 1 year were recruited. Patients were divided into group A (n=85, yes) and group B (n=268, no) according to the occurrence of cardio-renal composite endpoint events. Clinical and pathological characteristics of the two groups were compared and analyzed.

Results : Approximately 14.7% (52/353) of IgAN patients presented with cardiovascular diseases at the time of renal biopsy. 55.8% (197/353) patients presented with hypertension. Prognostic analysis showed that hypertension, urinary protein, eGFR, the presence of endocapillary proliferation (E1), tubular atrophy/interstitial fibrosis (T2), and moderate-severe intrarenal arteriosclerosis are independent risk factors affecting the cardiac-renal prognosis of IgAN ($P < 0.05$). In IgAN patients with moderate-severe intrarenal arteriosclerosis, urinary protein ($P = 0.028$), eGFR ($P = 0.001$) and E1 ($P = 0.003$) are independent risk factors affecting the cardiac-renal prognosis of IgAN patients.

Conclusions : The occurrence of cardiovascular diseases in patients with IgAN is frequently observed. In addition to the conventional risk factors associated with IgAN, including hypertension, initial proteinuria, eGFR, E1 and T2 lesion, moderate-severe intrarenal arteriosclerosis also contributes to the cardiac-renal prognosis of individuals with IgAN. In IgAN patients with moderate-severe intrarenal arteriosclerosis, Oxford-E lesion is an independent risk factor affecting the cardiac-renal prognosis of IgAN patients. This study suggested that the impairment of endothelial cells could potentially serve as a link between heart and kidney disease.