INTRODUCTION AND AIMS: It is not clear the clinical data, pathological changes in patients with IgA Nephropathy with or without IgG deposition in glomeruli. This paper is to explore the significance of IgG deposit in glomeruli in patients with IgA Nephropathy.

METHODS: The data were collected from 327 patients with IgA nephropathy diagnosed by renal biopsy in the First Affiliated Hospital of Nanjing Medical University from January 2015 to 2016. All renal biopsy samples were examined by light microscopy and immunofluorescence. IgA nephropathy patients were divided into IgA group (n=245) and IgA-IgG group (n=82). All the patients were divided into two groups by Lee, Oxford and Hass.

RESULTS: Patients with IgA Nephropathy in IgA+IgG group had more 24 hours urine protein, higher serum creatinine, uric acid, hypertension and lower complement C4, eGFR than those in IgA group (P<0.05). The score of renal tubular atrophy/interstitial fibrosis (T) was higher IgA+IgG group than that in IgA group (P<0.05). There was no significant difference in proliferation of mesangial cells, mesangial hypercellularity, segmental glomerulosclerosis or adhesion, hyperplasia of endocapillary cell (P>0.05). Patients with IgG deposits along glomerular basement membrane (GBM) subgroup had younger age, higher blood pressure than those in patients with IgG deposit in mesangial area subgroup (P<0.05). The eGFR, urea nitrogen and uric acid in IgG along GBM deposit subgroup were lower than those in the IgG deposit in mesangial area subgroup (P<0.05). There was no significant difference in the pathological changes between the two subgroups (P>0.05).

CONCLUSIONS: The patients with IgA nephropathy with IgG deposition are younger, more 24 hours urine protein, higher serum creatinine, and hypertension. Even the different position of IgG deposit in glomeruli may also have different clinical significance. We should strengthen the understanding of IgA nephropathy with IgG deposition and delay the progress of IgAN.