SP141 **A WIDE VARIETY OF DIAGNOSES IN ELDERLY KIDNEY BIOPSIES**

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INTRODUCTION AND AIMS: As populations live longer, the percentage of elderly increases. Older kidneys are more susceptible to acute insults including drug nephrotoxicity. Incidence of chronic renal diseases are also increased which can be explained with long standing systemic diseases, increased cardiovascular disease and aging itself. Furthermore, paraneoplastic diseases and late peak of some vasculitides also lead to renal disease. Primary glomerulonephritis (GN) is not unexpected at all. All these culprits contribute to a wide range of different diagnoses in this group of patients. In this study we aimed to demonstrate pathological spectrum of elderly patients' kidney biopsies.

METHODS: Renal biopsies performed on all patients aged $\geq$ 65 years, during the period 2008-2017 were retrospectively analyzed.

RESULTS: A total number of 146 cases were identified. Mean age was 69.3$\pm$4.1 with 94 of patients being male (64%). Oldest patient was 82 years old. Main presentations were nephrotic syndrome (NS) in 50 (34%), acute kidney injury (AKI) in 36 (24%), non-nephrotic proteinuria in 26 (17%) and rapidly progressive glomerulonephritis in 16 (11%) cases. Number of glomeruli per biopsy was 20.9$\pm$11.8. No minor or major complications occurred. Twenty different diagnoses were made in total. Most common were amyloidosis in 26 (17%), membranous glomerulopathy in 24 (16%), FSGS in 19 (13%) and pauci-immune cresentric GN in 14 (9%) cases respectively. Others were diabetic nephropathy, hypertensive nephrosclerosis, acute tubulointerstitial nephritis, multiple myeloma cast nephropathy, membranoproliferative GN, cresentric GN, Ig A nephritis, chronic tubulointerstitial nephritis, infectious GN, acute tubular necrosis, Goodpasture syndrome, SLE renal involvement, thrombotic microangiopathy, diffuse proliferative GN, fibrillary GN, atheroembolic disease (Table1). Thirty three patients were diagnosed with a malignancy. In 19 (57%) of them biopsy preceded the diagnosis. Most common malignancy was multiple myeloma with 16 (48%) cases. Most common solid tumors were prostate and lung cancer in four and three cases respectively. Forty-eight (32%) patients received immunosuppressive treatment and nineteen (13%) received chemotherapy. Patients were followed up for mean period of 22.6$\pm$26.1 months. Overall need for hemodialysis was 23% and overall mortality was 34%. For subgroup analysis, patients were divided into two groups by taking age 75 as a cut off value. Frequencies of amyloidosis, membranous glomerulopathy, FSGS, pauci immune GN were similar between two groups (X^2,p values 0.473, 0.825, 0.552, 0.880 respectively.) Malignancy prevalance was not statistically different either. (X^2,p values 0.997).

CONCLUSIONS: Differential diagnosis of acute or chronic kidney injury in the elderly is broad. Age alone is not a reliable predictor of diagnosis. Renal biopsy is a safe and indispensable tool in order to implement appropriate treatment.

Diagnoses of patients and their percentages

Diagnosis	Number of cases/ percentages	Diagnosis	Number of cases
Amyloidosis	25 (17%)	Ig A nephritis	4
Membranous glomerulopathy	24 (16%)	Chronic TIN	3
FSGS	19 (13%)	Acute tubular necrosis	2
Pauci immune cresentric GN	14 (9%)	Goodpasture Syndrome	1
Diabetic nephropathy	11 (7%)	SLE renal involvement	1
Hypertensive nephrosclerosis	11 (7%)	Thrombotic microangiopathy	1
Acute TIN	8 (5%)	Diffuse proliferative GN	1
Cast nephropathy	6 (4%)	Infectious GN	1
Membranoproliferative GN	6 (4%)	Fibrillary GN	1
Other cresentric GN	5 (3%)	Atheroembolic disease	1

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