

EPIDEMIOLOGY OF HISTOLOGICALLY PROVEN GLOMERULONEPHRITIS IN KAZAKHSTAN

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Abstract

Background and aim. There is a lack of data pertaining to the incidence of biopsy-proven glomerulonephritis (GN) in Kazakhstan due to low rate of renal biopsy. This retrospective study aims to review the data from all adult native renal biopsies performed in the Scientific-Research Institute of Cardiology and Internal Diseases from 2013 to 2018.

Materials and methods. The review was conducted using standard methods and frameworks using only biopsy-confirmed data. Pathology reports of 179 adult native kidney biopsies were reviewed, of which 166 had GN diagnoses. Age, gender, clinical indication and histopathology findings were compared.

Results. Male preponderance was noted overall (~58%). Nephrotic syndrome was the commonest indication of renal biopsy. The frequency of reported primary pathologic patterns included, membranous nephropathy (MN) 8.9 % (primary MN 93.7%, and secondary MN 6.25%); focal segmental glomerulosclerosis (FSGS) 21,7%; minimal change disease 4.4%; mesangiocapillary GN (MCGN) 19.5%; endocapillary glomerulonephritis 8.9% and IgA nephropathy 8.3%.

Conclusion: FSGS and MCGN appear to be the predominant primary GN in amongst population of Kazakhstan. Nephrotic syndrome is the most common indication for a renal biopsy. While FSGS incidence has significantly increased with time, mesangiocapillary GN incidence has not shown any trend. Incidences of MCGN are mostly associated with hepatitis B and C; lupus nephritis and ANCA-associated vasculitis.