

## OP 13

### **Histological patterns of renal biopsies at Teaching Hospital, Jaffna: A retrospective analysis**

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**Introduction:** Renal biopsy is important for histopathological diagnosis, prognosis and treatment. Identification of common indications for renal biopsy, histological patterns and diagnoses are important to identify the disease burden and trends of disease pattern within the region. Immunofluorescence improves the diagnostic specificity of renal disease. This study is the first to be

carried out in the Northern region following introduction of immunofluorescence studies to Teaching Hospital, Jaffna.

**Objective:** To describe the histological patterns and indications of renal biopsies of adult patients above the age of 18 years who underwent renal biopsy at Teaching Hospital, Jaffna.

**Methods:** A retrospective descriptive study of 270 renal biopsies performed from for a period of 2 years from July to October 2022 were analyzed from biopsy request forms, histological reports of light microscopy and immunofluorescence staining patterns.

**Results:** The mean age of patients was 44 years (SD±16) and 52.6% were males. In regard to adequacy of samples: less than 5 glomeruli were found in 21.6%, 5-10 glomeruli in 39.6%, 10-15 glomeruli in 21.6%, 15-20 glomeruli in 15.7% and more than 20 glomeruli in 1.5%. The clinical indications for biopsy was unexplained acute renal failure (27.4%) followed by nephrotic syndrome (26%), unexplained proteinuria (15.5%), hematuria (15.5%) and unexplained chronic renal insufficiency in 4.4%. Another 17% of previously diagnosed patients underwent biopsy for further assessment. Diabetic nephropathy (34.2%) was common followed by focal segmental glomerulosclerosis (FSGS) in 14.4%. Crescentic glomerulonephritis (presence of crescents) and IgA nephropathy were seen in 12.6%. Minimal change disease was seen in 6.3%.

**Conclusion:** In this study majority of biopsies were performed in males with a mean age of 44 years. Inadequate sample of less than 5 glomeruli were found in 21.6% of biopsies potentially confounding the incidence. The commonest clinical indications for renal biopsy were unexplained acute renal failure and nephrotic syndrome. Diabetic nephropathy was the commonest histological diagnosis followed by FSGS.

**Keywords:** Renal biopsy, Histological patterns, Diabetic nephropathy