Day case per-cutaneous kidney biopsy with interventional radiologist; experience in a District General Hospital.

Dr Rotimi Oluyombo¹, Dr Smita Gunda¹,², Dr Jason Smith¹, Dr Suresh Fernando¹, Dr Shiva Ugni²
¹The Queen Elizabeth Hospital, King’s Lynn, United Kingdom, ²Cambridge University Hospitals, Cambridge, United Kingdom

Percutaneous kidney biopsy is a gold standard procedure not only for tissue diagnosis of intrinsic renal disease but also to determine the type of treatment and to prognosticate renal disease based on pathological findings. Various guidelines have emphasized the need to minimize harm and increase yield during kidney biopsy. According to the Society of Interventional Radiology Consensus Guidelines, it is classified as high risk bleeding procedure. Most kidney biopsies are done by nephrologists. Post-biopsy complication is high in centres with low volume of kidney biopsy procedure. Kidney biopsy is done by interventional radiologists in our centre. We present our experience over 3 years.

Methods: It is a retrospective review of native kidney biopsies carried out in our centre from January 2017 to November 2019. We reviewed the medical notes, laboratory and histological reports of these patients.

Results: There were 33 kidney biopsies performed of which 2 (6.8%) were in-patients. We were able to get complete information on 29 patients. Mean age was 61±14.8 years and 55.2% were males. Proteinuria was the commonest indication and 16% had acute kidney injury. Mean serum creatinine was 160.4±98.75µmol/l. Mean haemoglobin was 130.5±19.08 g/L while platelet count was 293.5±93.28cells/l and INR 0.97±0.13. Median number of glomeruli was 29 (range of 5-104). Only in 2 samples were the glomeruli count less than 10. In 62% of kidney biopsies performed, 18G needle was used. Focal segmental glomerulosclerosis was the most common histological finding in 39.3% followed by diabetic glomerulosclerosis in 17%. None of the patients received desmopressin acetate (DDAVP). We reported no significant complications in our kidney biopsy cohort.

Conclusion: We conclude that kidney biopsy procedure is safe in secondary health care system and consideration should be given to increasing performance of the procedure by radiologists.