

# KSN 2016 Abstract Submission

## *Glomerular disease*

KSN2016ABS-1241

### Simple method of renal biopsy at OPD level

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**Background:** Renal biopsy is a prerequisite procedure for diagnosis and to know the prognosis of the glomerular diseases, however need a lot of skill and experience, unless sometimes need an embolization, nephrectomy etc. We have an experience of more than 3,000 cases of renal biopsy without major complications such as bleeding, embolization, nephrectomy etc. and recently we performed 170 cases of renal biopsies at the OPD level without any serious complications since last 2 years.

**Methods:** Total 170 cases were performed at OPD level during last 2 years at MIRAE-ING Kidney Center.

Before renal biopsy we checked bleeding tendencies, and light dinner before 6P.M., thereafter ask them to take oral rehydration solution Balncelyte(Colma,Korea) until 3 hrs before procedure.

Kidney biopsy were done by local lidocain anesthetic or sometimes anesthesia by Ketamin or midazolam. Biopsy needle was inserted under the ultrasound guide(GE Logi Q9) by the needle(TSK ACECUT biopsy needle,Japan) at the lower pole of the kidney. We checked renal hematoma by ultrasound 3 times until go home. All patients went home in 6 hours after procedure. As far as we know this kind of one day kidney biopsy procedure without admission is the first time try, although kidney biopsy is one of the most dangerous procedure in medical field. Biopsy material were sent to KPL(Korea Pathology Lab) immediately after biopsy.

**Results:** Tiny hematomas were detected in 10cases among 169 cases(male ratio 55.4%, mean age 24.1±15.5).

Gross hematuria or aggravation of hematuria were not detected in all cases. Renal medulla were contained in 5 cases between cortex among 170 cases. No serious complications were noted, but mild local pain.

IF results were reported on the day of kidney biopsy after 5 hrs and LM and EM were reported in two days after procedure. All cases went home after 6 hrs of procedure. Three patients took airplane for 1 hour after procedure without any problems.

Biopsy results were as follows: Diffuse mesangial proliferative glomerulonephritis 37cases(21.8%), IgA nephropathy 30cases(17.6%), Nonspecific glomerulonephritis 17 cases(10%), MPGN 11cases (6.5%), HSP nephritis 10 cases(5.9%), FSGS 10cases (5.9%), podocyte disease with diffuse mesangial proliferation 8 cases (4.7%), Minor glomerular change 4 cases (2.4%), diffuse sclerosing GN 3 cases(1.8%), Alport syndrome, Lupus nephritis, advanced diabetic nephropathy, C1q nephropathy were 2 cases respectively and others include acute PSGN, chronic tubulointerstitial nephritis,

**Conclusion:** Kidney biopsy is no longer a dangerous procedure if performed exactly at lower pole of the kidney, however need of experienced nephrologist and high resolution ultrasound.

**Keywords:** None