

Abstract Type : Poster

Abstract Submission No. : PO-1437

Why did we do an indication biopsy in early period after kidney transplantation?

Jin Hyuk Paek, Yaerim Kim, Woo Yeong Park, Kyubok Jin, Sung Bae Park, Seungyeup Han
Department of Internal Medicine-Nephrology, Keimyung University Dongsan Medical Center, Korea, Republic of

Objectives: Kidney biopsy remains the gold standard for diagnosis of kidney disease in both native and allograft kidney. However, safety in allograft kidney biopsy are less well understood than native kidney biopsy, especially in early period after kidney transplantation (KT). And there are relatively few data about indications and safety of early indication biopsy after KT.

Methods: We retrospectively reviewed 254 patients who received KT at Keimyung university Dongsan medical center between January 2014 and February 2018. Among 254 patients, 23 patients who underwent indication biopsy within 3 months after KT were enrolled.

Results: The mean age at allograft biopsy was 52.5 ± 11.1 years and 19 patients (82.6%) were male. Three patients (13.0%) underwent biopsy within 1 week after KT and 9 patients (39.1%) underwent within 1 month after KT. The most common cause for allograft biopsy was allograft dysfunction (69.6%), followed by delayed graft function (17.4%) and proteinuria (8.7%). Of the 23 patients, 8 were diagnosed with acute tubular injury, 7 were acute rejection, 4 were calcineurin inhibitor nephrotoxicity, 3 were mild interstitial inflammation. All patients with delayed graft function showed acute tubular injury and all patients who underwent allograft biopsy due to proteinuria with stable graft function showed mild interstitial inflammation. Preformed donor specific antibody (DSA) was significantly higher in acute rejection group compared with no rejection group (3 vs 0, respectively, $p = 0.020$). However, there was no significant difference in creatinine level at 12 months after allograft biopsy between 2 groups. Following allograft biopsy, there were 5 complications (21.7%); 3 cases of hematoma (13.0%) and 2 arteriovenous fistula (8.7%). But, there were no clinically significant complications.

Conclusions: Early indication biopsy is safe. Patients with preformed DSA need to undergo allograft biopsy quickly if kidney function deteriorates. Early diagnosis and adequate treatment is important for preserving allograft kidney function.