

**Abstract Submission No. : 2153**

**Indication Renal biopsies and outcomes in patient receiving ABO incompatible renal transplantation. Indian institutional experience**

**Pallav Gupta**

Department of Dept of Pathology, Sir Ganga Ram hospital, India

**Objectives:** ABO-i renal transplantation has gained momentum and over the last decade it has helped to expand the donor pool. Many studies describing protocol biopsies in ABO-i transplant patients have been published in literature. Present study describes renal biopsy findings in indication renal biopsies performed for graft dysfunction.

**Methods:** Retrospective study (January 2012 to June 2019). 164 patients were included in the study. Biochemical parameters, serial IgG Anti-ABO titres and class I and II DSA findings recorded. Graft biopsies were reviewed in detail according to the Banff 2017 update.

**Results:** 65 biopsies from 54 patients were reexamined. Acute antibody mediated rejection (12.8%) was more than acute cellular rejection (1.8%). AMR cases had evidence of microvascular inflammation ( $g+ptc \geq 2$ ) and C4d positivity in 100% cases. Acute tubular injury (ATN) alone was seen in 10.3 % patients. 65% of these patients had C4d positivity in peritubular capillaries (mild to moderate) and only one case developed chronic active antibody mediated rejection on follow up. 1 year patient and death censored graft survival after transplantation was 92% and 98% respectively and at 3 year it was 88% and 91%. Patients with AMR had reduced patient (76.5%) and death censored graft survival (84.6%) at 1 year.

**Conclusions:** AMR can be reliably diagnosed in ABO-i transplants by looking at microvascular inflammation ( $g+ptc \geq 2$ ) score. Acute tubular injury with C4d positivity without microvascular injury does not confirm AMR. We recommend specific diagnostic criteria for ABO-incompatible transplants in Banff classification.