RENAL ALLOGRAFT BIOPSY : A DESCRIPTIVE DATA FROM SINGLE CENTRE

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Introduction:

Renal transplant remains the best treatment modality for patients with End Stage Renal Disease. Long-term graft and patient survival depends largely on the preservation of allograft function. Renal allograft biopsy is the gold standard investigation in examining allograft dysfunction and it provides crucial information such as grading of pathology process, enabling diagnosis, guide treatment and also graft prognosis.

Methods:

We reviewed medical records of patients who had renal allograft biopsy done in HTAA. Their baseline demographic data, biopsy indication, biopsy results based on Banff 2013 classification, graft and patient outcome were examined.

Results:

From 2015 until present, there were 11 renal allograft biopsies done. Out of 11 grafts , 2 were from living donor and 9 from deceased donor. Time from transplant to graft biopsy ranging from 6 months to 17 years. All the indications for biopsy were due to creeping in creatinine trend, ranging 30% to 50% from baseline. Based on Banff 2013 classification, the biopsy results showed normal (category1) in one patient, antibody mediated rejection (category2) in two patients, borderline changes (category3) in one patient , T-cell-mediated rejection (category4) in two patients, interstitial fibrosis/tubular atrophy (IFTA) (category5) in three patients , other diagnoses (category6) in two patients .

Out of 11 patients until present, there are 4 patients with stable graft function, one with failing graft function, and one with failed graft and ongoing haemodialysis. Another 5 patients passed away due various reasons and all of them had failed graft prior to succumb.

Banff 2013 Classification	Number
Category 1 (Normal)	1
Category 2 (Antibody-Mediated Rejection)	2
Category 3 (Borderline Changes)	1
Category 4 (T-cell Mediated Rejection)	2
Category 5 (Interstitial Fibrosis/ Tubular Atrophy)	3
Category 6 (Other Diagnosis)	2

Graft Status Until Present	Number
Stable Graft Function	4
Failing Graft Function	1
Failed Graft (Hemodialysis)	1
Death (All had Failed Graft prior to Succumb)	5

Conclusions:

The main findings of allograft biopsies in our centre were due to IFTA followed by antibody mediated rejection and T-cell mediated rejection. This showed that graft biopsy plays a crucial role in determining diagnosis , guide treatment and eventually grafts and patients prognosis.

References
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