POS-765 Diagnosis, treatment and outcome of transplant renal artery stenosis: experience from a kidney transplant centre in Nigeria [Abstract only]

FAPONLE, A, OLATISE, Adaku, AMEH, O, ABIOLA, B, ODEYEMI, A and ADAKU, T

available data regarding the outcome of ABO-incompatible renal transplantations done in the Covid 19 era. So, hereby, we present the same.

Methods: We have analysed a total of 25 consecutive ABOiKTR (ABO incompatible Kidney Transplant Recipients) from October 2020 till June 2021.They were followed up for a

variable period ranging from 9 months for transplantations done in the month of October 2020 to 1 month for recipients undergone transplant in June 2021.

All the patients received Rituximab 100 mg or 200 mg (depending on the baseline titre) for Bcell depletion in addition to plasma exchange for anti ABO antibody removal.

The target anti ABO titre for transplant was ≤ 1:64. They received induction therapy with anti thymocyte globulin and methylprednisolone.

The outcomes were assessed on the basis of patient survival, graft survival, graft function in terms of rejection, infective complications and duration of post-transplant stay.

Results: The mean age of recipients was 37 years with 88% male and 12% female recipients.The median duration of follow up was 156 days. The highest baseline titre transplanted

was 2048. 5 patients were transplanted with titre of 1024.The mean serum creatinine at discharge was 1.36 ± 0.37 and the mean creatinine at follow up was 1.5 ± 0.75. The

mean post transplant hospital stay was 13.17 ± 4.5 days.

The patient survival as well as death censored graft survival for ABOiKTR were 96% each in our study cohort. The single graft and patient loss was due to fungal

pyelonephritis.During follow up, 3 patients (12%) experienced episode of biopsy proven rejection ; 2 patients (8%) suffered from Antibody Mediated Rejection (ABMR) and 1

patient (4%) from T Cell Mediated Rejection (TCMR) who were managed successfully. The infection related complications were as following in our study:

1 patient (4%) suffered from culture positive Urinary Tract Infection (UTI) and 3 patients (12%) suffered from gastrointestinal (GI) infection with positive stool panel array.

2 patients required repeated hospitalisation for infection induced complications.

We had transplanted 5 covid recovered patients after a mean duration of 71.2 days with mild to moderate severity.

3 patients (12%) acquired covid infection post transplant who were managed on OPD basis and recovered with normal graft function.

There were no cases of pneumonia, cytomegalovirus infection or BKV nephropathy during follow up.

Conclusions: Considering the high incidence of infection and death rate in dialysis, it is prudent to transplant the eligible patients. There is no significant difference in the patient and graft

survival in covid 19 era as compared to our pre covid studies. Rather, it is interesting to note that the incidence of infection has gone down in view of the covid related

precautions being followed in transplant unit .There is no increase in mortality or infection in a shorter term of follow up of our study period.

So, ABO incompatible transplantations can be done in the covid 19 era with covid related precautions followed strictly.

No conflict of interest

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ANALYSIS OF CORRELATION BETWEEN GLUCOCORTICOID RECEPTOR POLYMORPHISMS AND NEW-ONSET DIABETES IN RENAL RECIPIENTS

Etemadi, J*[1], Motavalli, R[1], Majidi, T[1], Hejazian, SM[1], ZUNUNI VAHED, S[1], Abbasian, S[1]

[1]Tabriz University of Medical Sciences, Kidney Research Center, Tabriz, Iran

Introduction: New-onset diabetes after transplantation (NODAT) is one of the severe metabolic complications after transplantation. Glucocorticoid receptor is encoded by *NR3C1* gene and it seems that polymorphisms in this gene lead to sensitivity increase to insulin. Therefore, the aim of the study was to evaluate four common polymorphisms in the *NR3C1* gene in kidney recipients with NODAT.

Methods: Blood samples were collected from 32 NODAT and 59 non-diabetic renal-transplanted patients. After DNA extraction, *ER22/23EK*, *A3669G*, *Bcl* I, and N363S polymorphisms of the *NR3C1* gene were amplified and directly sequenced using specific primers.

Results: Results demonstrated that there was no correlation between diabetes incidence and four investigated polymorphisms of glucocorticoid receptor gene. Nevertheless, it was determined that diabetic patients' age were higher than non-diabetic patients. There was a significant association between NODAT and acute rejection.

Conclusions: Based on gathered information in this research, nor inhibitor or resonator polymorphisms had an effect on NODAT development in the Azari population. Further investigations should be performed with a large sample size.

No conflict of interest

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DIAGNOSIS, TREATMENT AND OUTCOME OF TRANSPLANT RENAL ARTERY STENOSIS: EXPERIENCE FROM A KIDNEY TRANSPLANT CENTRE IN NIGERIA

Faponle, A*[1], Olatise, O[1], Ameh, O[1], Abiola, B[1], Odeyemi, A[1], Adaku, T[1]

[1]Zenith Medical and Kidney Centre, Department of Medicine, Abuja, Nigeria

Introduction: Transplant renal artery stenosis (TRAS) is an important post-surgical complication that can lead to graft loss and premature death in kidney transplant recipients if not identified and treated on time. TRAS commonly presents as hypertension and kidney allograft dysfunction within 6 months after transplantation. In this case, the refractory hypertension was blunted because our patient had chronic diarrhoea.

Methods: A 53-year-old male had living related kidney transplantation in our hospital for end-stage renal disease secondary to hypertension. The donor was his 25 year old daughter, who had a renal anatomy that was notable for three renal arteries: two main renal arteries on a common aortic patch and a third superior pole renal artery on a separate aortic patch. The superior pole artery supplied about 20% of the graft.

Our immunosuppression regimen included antithymocyte globulin induction, and maintenance immunosuppression was with tacrolimus, mycophenolate mofetil and corticosteroids. The postoperative course was uncomplicated except for some sub-graft function which resolved with a course of intravenous immunoglobulins and bortezomib.

However, within the first five months following kidney transplantation, he had recurrent diarrhea, palpitations, dizziness and persistently elevated blood pressure. He was admitted to the emergency ward, with extreme lethargy and a blood pressure of 110/70mmhg. He was dehydrated with oliguria and worsening graft function evidenced by rising serum creatinine from the presenting value of 610µmol/l to 1010µmol/l within 4 days.

Results: His condition did not improve despite intravenous fluid resuscitation, antibiotics and optimization of immunosuppressant. Tacrolimus trough level was within normal range, and urine, blood and stool cultures were negative. Chest X-ray showed evidence of mild pleural effusion. Duplex sonography of the graft was done and revealed paucity of flow within the allograft parenchyma. This was followed by a CT angiography of the renal allograft which showed a marked narrowing of the transplant renal artery from its juxta-anastomotic origin indicative of transplant renal artery stenosis.

Within 72hours of angiography, he had an urgent angioplasty. A 0.018in wire was successfully inserted into the segmental artery in the mid-pole of the kidneys and following stable access, a 5mm x 19mm uncovered balloon expandable stent was deployed at the renal artery and extending to the proximal renal artery.

Renal function significantly improved following angioplasty, evidenced by a steady decline in serum creatinine to 174µmol/l and an increase in urine volume which averaged 4000mls per day.

Conclusions: TRAS is fairly common with an incidence that ranges between 2-10%. It is important to recognize TRAS early in post-renal transplant patients because this can go a long way in salvaging the graft and avoiding mortality. Duplex sonography is commonly used as the initial screening tool as it carries a very high specificity rate of about 100% but a more definitive diagnosis involves some form of angiography. Percutaneous transluminal angioplasty with stent placement is generally agreed to be the first-line therapy for TRAS.

No conflict of interest