



ABS053

ROLE OF IMMUNOSUPPRESSANTS IN GRAFT REJECTION IN RENAL TRANSPLANT PATIENTS

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Background:

Organ transplants save a thousands of life each year of modern medicine. The main advantage of such intrusive procedure is that the patients can live a more natural life after the surgery with the help of immunosuppressants. But these immunosuppressants are found to produce certain toxicities and complications in renal transplant patients. Hence we designed a study to determine the variety of immunosuppressive drug regimens for post renal transplant patients and analyze the drug toxicities and complications in renal transplant patients.

Aim: The main aim of the study is to determine the incidence and recurrence of rate of graft rejection, toxicities due to immunosuppressive drugs, complications in renal transplant patients and the risk factors of infections in post renal transplant recipients.

Methods and Materials: The study was carried out in a multispeciality hospital in for a period of six months. A total of 45 patients between 18-65 years undergoing a single organ transplant were included in the study. These patients received any of the following immunosuppressive drug regimens such as cyclosporine A (CSA), mycophenolate mofetil (MMF), Azathioprine (AZA), Tacrolimus, Prednisolone, Methotrexate, Rituximab and Plasma exchange for renal transplantation. Exclusion criteria included patient on multiorgan transplant or second transplant, patients of any anatomical abnormalities, history of multi drug resistant fungal infection, advanced cardio- or pulmonary disease and patients whose interleukin 2 and granulocyte macrophage colony stimulating factor is high before 6 months of transplantation

Results: Among the 45 renal transplant patients 75.5% were males and 24.5% were females. Patients in the age group of 40 - 50 years were at a higher risk of renal failure. Majority of the post renal transplant patients received CSA, MMF and AZA. Based on toxicities, AZA produced toxicities in 17.7 % of patients followed by CSA in 15.5% and MMF in 15.5% cases. Of the total patients, 17.7% had major infections causing graft rejections that included the UTI (48.8%), upper respiratory tract infections (20%) and lower respiratory tract infections (17%). Post transplant diabetes mellitus was seen in 13.3% patients and post renal hypertension in 17.7% cases. Hemolytic uremic syndrome was predominant with 17.7% of patients, followed by glomerulonephritis (15.5%) and pyelonephritis (11.1%). Drug Toxicity is one of the factors for causing rejection in renal transplant in which 7 (28.8%) patients were affected from acute rejection by receiving immunosuppressive therapy, followed by 13 (55.5%) patients in chronic rejection and 14 (31.1%) patients not having toxicity to cause the rejection

Keywords: Renal Transplantation, Immunosuppressive therapy