EFFECT OF CONVERSION FROM MYCOPHENOLATE MOFETIL TO AZATHIOPRINE IN LIVING DONOR KIDNEY TRANSPLANTATION WITH CYCLOSPORINE BASED IMMUNOSUPPRESSANT

Mohammad Shakib - Uz Arefin[1], Harun -Ur Rashid[2],
[1]Kidney Foundation Hospital and Research Institute, Nephrology, Mirpur, Dhaka, Bangladesh
[2]Kidney Foundation Hospital & Research Institute, Nephrology, Mirpur, Dhaka, Bangladesh

INTRODUCTION

Mycophenolate mofetil(MMF) and azathioprine(AZA) are two immunosuppressive agents that are widely used in kidney transplantation. However, the cost of MMF is substantially greater than AZA.

OBJECTIVES

The present study is, therefore, intended to investigate the graft and patient outcome of kidney transplant recipients after withdrawal of MMF in patients who were initially treated with MMF in combination with Cyclosporine and prednisolone for at least six months.

METHODS

All first renal allograft recipients of both sexes ages ranging from 18 to 60 years and already completed > 6 months after renal transplantation with stable graft function were the study population. A total of 50 patients were consecutively included in the study. It was a prospective randomized control clinical trial.

RESULTS

The mean ages of the recipients in MMF and AZA groups were 32.6±10.2 and 34.5±9.1 years respectively. More than 80% of the patients in either group had 50% HLA typing matched.. At the end-point of study (6 months), no significant difference was observed between MMF and AZA groups in terms of episodes of renal allograft rejection (15.5% vs. 12.5%, p = 0.632) followed by Table 3 During the 6-months period after the withdrawal of MMF, renal function remain stable as is evident by negligible changes in albuminuria in mg/dl (24.0±4.5vs.26.2±11.9, p=.860 at month 1 and 21.9±11.3 vs.23.1±5.3,p=0.936 at month 6 followed by Table 1 and Table 2 level of serum creatinine in /L(151.6±34.9 vs. 148.6±34.8,p=.848 at month 1 and 157.9±41.5 vs.161.7±50.9,p=0.779 at month 6) and estimated glomeruler filtration rate(eGFR) in either group(Figure 1)

The findings of the present study suggest that both MMF and AZA are effective in preventing acute rejection of renal allograft recipients 6 months after renal transplantation and there is no demonstrable advantages of one over the other in terms of safety profile. Therefore, switching the patients of renal allograft recipients from MMF to AZA 6 months after transplantation may be safe and effective.

➢Allison AC, Eugui EM. Mechanisms of action of mycophenolate mofetil in preventing acute and chronic allograft rejection. *Transplantation* 2005; 80: S181.

➢A prospective randomized study comparing fixed dose versus concentration controlled mycophenolate mofetil regimens for de novopatients following renal transplantation (the FDCC trial). *Transplantation* 2006; 82(S2): 343.

RESULTS

Table 1: Comparison of outcome at 1 month between two groups

Outcome variables	Group		p-value
	MMF (n = 26)	AZA (n = 24)	
CMV infection*	1(3.8)	2(8.3)	0.469
Acute graft rejection*	0(0.0)	0(0.0)	-----
Serum creatinine (µmol/L)	151.6 ± 34.9	148.6 ± 34.8	0.848
Urine albumin (mg/dl)	24.0 ± 4.5	26.2 ± 11.9	0.860

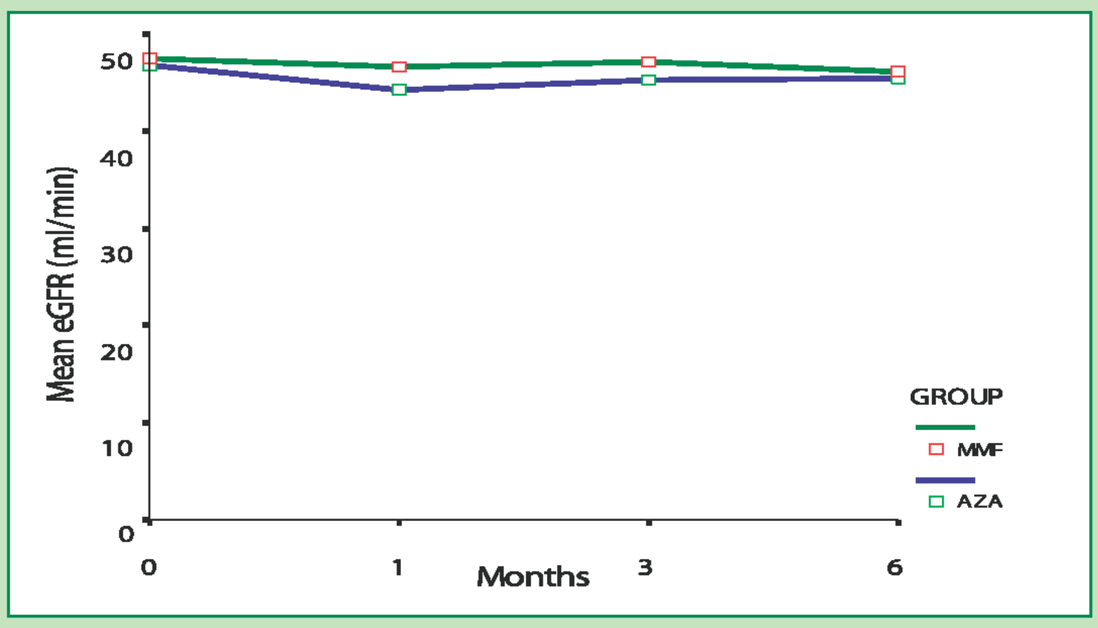
Table 2: Kidney function and CMV infection at 3 months between groups

Variables	Group		p-value
	MMF (n = 26)	AZA (n = 24)	
CMV infection*	1(3.8)	2(8.3)	0.469
Acute graft rejection*	4(15.5)	3(12.5)	0.632
Serum creatinine (µmol/L)	157.9 ± 41.5	161.7 ± 50.9	0.779
Urine albumin (mg/dl)	21.9 ± 11.3	23.1 ± 5.3	0.930
Blood sugar (µmol/L)	9.6 ± 2.7	5.7 ± 1.2	0.174

Table 3: Comparison of complications between two groups

Complications*	Group		p-value
	MMF (n = 26)	AZA (n = 24)	
Acute graft rejection	4(15.5)	3(12.5)	0.632
CMV infection	1(3.8)	2(8.3)	0.469
Tuberculosis	2(7.7)	1(4.2)	0.531
Anemia (Hb < 10 g/dl)	4(15.5)	5(21.0)	0.553
Leucopenia (WBC < 4000/cu-ml of blood)	2(7.7)	3(12.5)	0.539
Diabetes(NODAT)	4(15.5)	3(12.5)	0.571

Figure 1: Changes in eGFR between groups from baseline to 6 months



Poster No. SP844
Topic: EFFECT OF CONVERSION FROM MYCOPHENOLATE MOFETIL TO AZATHIOPRINE IN LIVING DONOR KIDNEY TRANSPLANTATION WITH CYCLOSPORINE BASED IMMUNOSUPPRESSANT
Sponsered by: HEALTHCARE PHARMACEUTICALS LTD.

52 ERA
844--SP
M2) Renal transplantation. Clinical.
MOHAMMAD SHAKIB UZ ZAMAN AREFIN
DOI: 10.3252/pso.eu.52era.2015
ePosters supported by F. Hoffmann- La Roche Ltd.