

## CYCLOSPORINE DOSING IN RENAL TRANSPLANTS

KUMAR A., BHALLA D., WADHAVAN S., JAUHARI H.,  
RENAL UNIT, NOIDA MEDICARE CENTRE, NOIDA, U.P., INDIA

Cyclosporine (CyA) dosage requirement in Indian renal allograft recipients has been reposted in only few studies. CyA dose in 127 renal transplant patients of Indian Origin (mean age  $42.02 \pm 10.74$  yrs. 100 males and 27 females) receiving CyA\* were studied retrospectively. The patients were on Triple drug immunosuppression regimen. Whole blood CyA though levels were assayed by HPLC method. Graft function was assessed by measuring Serum Creatinine and Blood Urea Nitrogen. Post Transplant periods were divided into 10 time periods as shown in table

Peiod in wks	Does of CyA mg/kg	CyA Levels Ng/ml	Mean bold Level (ng/ml) /dose (mg/Kg).
1	$7.57 \pm 1.33$	$194.61 \pm 76.15$	$26.80 \pm 12.93$
2-3	$6.67 \pm 2.25$	$268.97 \pm 173.81$	$39.85 \pm 21.74$
4-6	$6.69 \pm 1.60$	$337.42 \pm 156.61$	$54.39 \pm 29.91$
7-10	$5.63 \pm 1.10$	$304.89 \pm 162.05$	$52.78 \pm 22.42$
11-15	$5.24 \pm 1.47$	$305.58 \pm 162.23$	$60.91 \pm 32.52$
16-20	$4.70 \pm 1.26$	$270.55 \pm 126.07$	$58.91 \pm 25.45$
21-30	$4.10 \pm 1.35$	$225.38 \pm 115.05$	$58.95 \pm 31.20$
31-50	$3.58 \pm 0.91$	$223.35 \pm 452.22$	$63.17 \pm 37.36$
51-80	$3.51 \pm 1.15$	$198.49 \pm 113.12$	$61.18 \pm 39.50$
>80	$3.11 \pm 1.22$	$163.22 \pm 103.22$	$58.16 \pm 42.81$

Our analysis shows that after 3 weeks of oral administration of CyA renal allograft recipients developed more or less steady blood levels. The Indian Transplant patients population required less CyA doses to maintain therapeutic Trough Levels. Over 90% graft and patient survival was observed at the end of one year. We conclude that lower doses of CyA were bale to generate sufficient blood levels required for long term immunosuppression in Indian transplant recipients.