

CYCLOSPORINE DOSING AT VARIOUS POST RENAL TRANSPLANT PERIODS IN 127 INDIAN PATIENTS

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Cyclosporine (CyA) dosage requirement in Indian renal allograft recipients has been reported in only few studies. CyA dose in 127 renal transplant patients of Indian origin (mean age 42.02 ± 10.74 years, 100 males and 27 females) receiving CyA* were studied retrospectively. The patients were on Triple drug immunosuppression regimen. Whole blood CyA trough 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.

Period in wks	Doses of CyA mg/kg	CyA levels Ng/ml	Mean blood level (ng/ml)/dose (mg/Kg)
1	7.57 ± 1.33	194.61 ± 76.15	26.80 ± 12.93
2-3	6.67 ± 2.25	268.97 ± 173.81	39.85 ± 21.74
4-6	6.69 ± 1.60	337.42 ± 156.61	54.39 ± 29.91
7-10	5.63 ± 1.10	304.89 ± 162.05	52.78 ± 22.42
11-15	5.24 ± 1.47	305.58 ± 162.23	60.91 ± 32.52
16-20	4.70 ± 1.26	270.55 ± 126.07	58.91 ± 25.45
21-30	4.10 ± 1.35	225.38 ± 115.05	58.95 ± 31.20
31-50	3.58 ± 0.91	223.35 ± 152.22	63.17 ± 37.36
51-80	3.51 ± 1.15	198.49 ± 113.12	61.18 ± 39.50
>80	3.11 ± 1.22	163.22 ± 103.22	58.16 ± 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 patient 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 able to generate sufficient blood levels required for long term immunosuppression in Indian transplant recipients.