

**** CYCLOSPORINE (CyA) THROUGH LEVELS AND CyA DOSING IN INDIAN RENAL ALLOGRAFT RECIPIENTS**

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Doses of CyA have ranged from 16-18 mg/kg (induction) and 8-10 mg/kg (maintenance) when the drug was first introduced to 8-10 mg/kg (induction) & 4-5mg/kg (maintenance) in recent years in studies from various western centres. Ethnic factors may govern the CyA dosage requirement. 127 renal transplant patients of Indian origin (age 42.02 ± 10.74 yrs. 100 males and 27 females) receiving CyA* (b.i.d. dosage) were observed retrospectively for CyA dose and trough levels (HPLC) and its correlation with graft and patient survival were studied. Serum Creatinine and BUN levels assessed graft function. Post Transplant periods were divided into four time periods as shown in table.

CyA Trough levels and CyA doses at different post transplant periods

Period in Weeks	CyA dose mg/kg	CyA Levels ng/ml
1-4	7.35 ± 1.66	233.95 ± 130.95
5-12	5.92 ± 1.49	297.78 ± 162.61
13-36	4.46 ± 1.45	270.65 ± 154.73
>36	3.42 ± 1.10	192.3 ± 106.96

We also observed that more than 90% of blood levels were above 100ng/ml. Our analysis shows that to maintain the therapeutic Trough Levels in the range of 200-300ng/ml between 5-12 weeks and 13-36 weeks. CyA dose required was 3.97-5.96mg/kg and 3.29-4.94mg/kg respectively, After 36 weeks 2.67-4.45mg/kg was sufficient to keep the blood levels between 150-250ng/ml. 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 immunosuppressive therapy in Indian transplant recipients.

(Panimun Bioral ®, Panacea Biotec Ltd.. India)