The adequacy of peritoneal dialysis in a single Chinese center

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Objective: To assess the adequacy of peritoneal dialysis in Chinese by analyzing the relationship between weekly urea kinetics (Kt/V) and clinical outcomes.

Methods: A total of 146 patients on continuous ambulatory peritoneal dialysis for more than 6 months in the Shanghai Renji Hospital between July 1997 and March 1999 were enrolled into this study. They were assigned to three groups according to weekly Kt/V: Group A, Kt/V less than 1.7; Group B, Kt/V between 1.7 and 2; and Group C, Kt/V greater than 2. Patient and technique survivals were analyzed by using the log rank method.

Results: The overall 2-year actuarial patient and technique survivals were 90% and 76%, respectively. The 2-year actuarial patient survival was 78% for Group A, 97% for Group B, and 96% for Group C (p<0.05). The 2-year technique survival was 56% for Group A, 88% for Group B, and 88% for Group C. Both actuarial patient and technique survivals in Group A were significantly lower (p<0.05) compared with the other two groups.

Conclusions: The study showed that clinical outcomes in Groups B and C patients were similar. However, patients with weekly Kt/V values less than 1.7 had poorer clinical outcomes compared with patients from groups B and C. We conclude that Chinese patients who were receiving peritoneal ambulatory dialysis may benefit from weekly Kt/V greater than 1.7. (Hong Kong J Nephrol 2001;3(2):79-83)

Key words: Creatinine/blood, Peritoneal dialysis, Survival analysis, Treatment outcome