NEP-08

EARLY INITIATION OF DIALYSIS AND LATE IMPLANTATION OF TENCKHOFF CATHETERS INCREASE HOSPITALIZATION DUE TO PERITONEAL DIALYSIS (PD)-RELATED INFECTION AFTER START OF CHRONIC PD

Chih-chung Shiao† , Jenq-Wen Huang, Kuo-Liong Chien, Hsueh-Fang Chuang ‡,
Yung-Ming Chen, Kwan-Dun Wu

Renal Division, Department of Medicine, Department of nursing‡, National Taiwan University Hospital and College of Medicine, National Taiwan University

† Department of Internal Medicine, St. Mary's Hospital. Lo Tung, Taiwan.

BACKGROUND: The objective of this study was to determine if different patterns of referral, catheter implantation and dialysis initiation could influence survival and morbidity after the start of chronic PD.

METHODS: Kaplan-Meier survival and Cox regression analyses were used to estimate mortality and event-free probability for hospitalization among different patterns of pre-dialysis care, which included Early vs Late referral, Timely vs Late implantation of Tenckhoff catheters, Early vs Late start of dialysis. Patients starting PD in a medical center at Northern Taiwan, between 1 January 1997 and 30 April 2005 were enrolled and followed up until 30 June 2005.

RESULTS: Two hundred seventy-five patients were enrolled. Late start (n=168) was associated with a significant survival advantage (log rank<0.001), and along with Timely implantation (n=58), exhibited a reduced risk for all-cause hospitalization (log rank=0.026, 0.014, respectively). Independent predictors for mortality included basal serum creatinine (hazard ratio [HR] 0.87; p=0.019), diabetes mellitus (DM) (HR 3.70; p=0.001), and age (HR 1.06; p<0.001); whereas for all-cause hospitalization, these were basal serum creatinine (HR 0.95; p=0.028), Late implantation (HR 1.81; p=0.009), DM (HR 1.96; P=0.003), and age (HR 1.01; p=0.04).

CONCLUSION: Our data indicate that early start of dialysis adversely affected patient survival after initiation of chronic PD. Furthermore, early start of dialysis and late implantation of PD catheters are strong predictors for all-cause hospitalization events, especially those secondary to PD-related infection.

Key words: end-stage renal disease, peritoneal dialysis, survival, Tenckhoff catheter.