XLVII ERA-EDTA Congress - II DGfN Congress
June 25-28, 2010
Munich, Germany

PERITONEAL DIALYSIS AS A PREDIALYSIS MODALITY CHOICE: PREDICTORS OF COMMENCING PERITONEAL DIALYSIS VERSUS HAEMODIALYSIS

Jennifer Hanko[2], Alexandra Romann[1], Monica Beaulieu[1,2]
[1]BC Provincial Renal Agency, Vancouver, BC, Canada, [2]Division of Nephrology, University of British Columbia, Vancouver, BC, Canada

BACKGROUND: In our province, 36% of patients who choose peritoneal dialysis after predialysis renal replacement therapy (RRT) education actually start and remain on long term haemodialysis. This dramatically reduces the number of patients starting haemodialysis with an AV fistula. We set out to evaluate the following: in patients who choose peritoneal dialysis after predialysis RRT education what demographic, clinical, or system factors identify those that will end up starting on haemodialysis?

METHODS: This was a retrospective cohort study of all patients starting RRT between Dec 31, 2006 and Dec 31, 2008 who had chosen PD as their preferred dialysis modality prior to starting RRT. Patients were followed until July 20, 2009. Inclusion criteria were a minimum of 3 months nephrology follow-up prior to RRT start, a recorded date for receiving dialysis modality education, a recorded preference for PD, and a minimum of 90 days on dialysis after start date. Patients who had received prior renal replacement therapy for any reason were excluded. Data was abstracted from PROMIS, a province-wide electronic medical record for chronic kidney disease patients.

RESULTS: A total of 114 patients had chosen PD as their preferred dialysis modality and met study inclusion criteria. Of these, 73 (64%) started on PD and 41 (36%) started on HD. In the HD group, 6 patients subsequently switched to PD.
Those who commenced HD vs PD were significantly older (70 vs 63 years, p = 0.0366), had more cardiovascular disease (49% vs 29%, p = 0.0326), and had lower serum albumin levels (34.0 g/L vs 37.5 g/L, p = 0.0254).

There was no significant difference in gender, race, history of diabetes, BMI (26.6 vs 25.8, p = 0.6472), duration of nephrology follow-up (26 vs 29 months, p = 0.8992), or eGFR slope in the year preceeding RRT (-6.86 vs -5.72 ml/min, p = 0.6555) between the group starting HD vs those starting PD.

CONCLUSIONS: Patients who chose PD but ended up starting HD were likely to be older and had a history of cardiovascular disease. There was no difference in the eGFR decline over the preceeding year, suggesting that the patients who started HD but chose PD were likely not patients who quickly deteriorated and required an urgent dialysis start. We recommend that RRT choice be re-discussed with patients at regular intervals. Specific attention should be paid to older patients with cardiovascular disease who have chosen PD in order to ensure that they are still likely to start on PD and to consider referral for vascular access creation in these individuals.