PATIENT EDUCATION PROMOTING 'PERITONEAL DIALYSIS FIRST': ITS IMPACT ON UNEXPECTED HAEMODIALYSIS STARTS

Jennifer Hanko\textsuperscript{2}, Alexandra Romann\textsuperscript{1}, Monica Beaulieu\textsuperscript{1,2}
\textsuperscript{1} BC Provincial Renal Agency, Vancouver, BC, Canada, \textsuperscript{2} Division of Nephrology, University of British Columbia, Vancouver, BC, Canada

BACKGROUND: Education of predialysis CKD patients encourages them to consider independent renal replacement therapy (RRT) options such as peritoneal dialysis (PD) first. As a result, PD is the documented first choice in about 50\% of patients with an RRT decision. However, PD prevalence rates remain about 25\%. We hypothesized that many patients who chose PD predialysis start and remain on haemodialysis (HD), potentially leading to more unplanned HD starts and lower AV fistula incidence rates in these patients compared to those who chose and started HD.

METHODS: We conducted a retrospective cohort study of patients starting dialysis between Dec 31, 2006 and Dec 31, 2008 with at least 3 months predialysis follow-up and at least 1 predialysis RRT education session. Data was abstracted from PROMIS, a province-wide electronic medical record for CKD patients.

RESULTS: There were 508 patients included in the study. At 3 months prior to dialysis start, 127 (25\%) patients chose HD, 114 (22\%) PD, 13 (3\%) pre-emptive transplant, 5 (1\%) conservative management, and 249 (49\%) were undecided.

In the HD group, 115 (91\%) commenced and remained on HD. In the PD group, 73 (64\%) commenced PD and 41 (36\%) HD. In the undecided group, 170 (68\%) commenced HD and 79 (32\%) PD.

77\% (98/115) of patients who chose and started HD had an AVF created predialysis. Of the patients who chose PD but started HD, 39\% (16/41) had an AVF created at HD start. For the undecided patients, 48\% (81/170) had an AVF created predialysis.

CONCLUSIONS: Patients who chose HD predialysis started on HD 91\% of the time and 77\% had an AVF created predialysis. In contrast, patients who chose PD ended up starting HD 36\% of the time, with only 39\% having an AVF created. Also of note, 68\% of patients who were undecided after RRT education started HD. Attention must now be turned to identifying the patient and system factors that predict failure to commence PD for those who chose it predialysis. In addition, the majority of patients who remain undecided are likely to commence HD and may benefit from AVF creation. These measures should improve AVF incidence rates at HD start.