Patient outcomes of a 2-exchange assisted continuous ambulatory peritoneal dialysis (aCAPD) programme for frail older patients

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Introduction: Recognising the burden that hospital haemodialysis places on frail patients in terms of time away from home, transport and haemodynamic shifts, we have developed a 2-exchange aCAPD programme to enable this group to receive a home-based therapy. Eligible patients for the programme include frail, mostly elderly patients who are symptomatic from their advanced kidney disease and have residual kidney function. The focus of the programme is to optimise patients’ symptoms while avoiding a high treatment burden. At three months each patient has a follow up conversation with their consultant to discuss symptoms, treatment burden and to plan their future care. This is a quality improvement study to review the outcomes of the programme.

Methods: In this observational study, all 2-exchange aCAPD patients attending their routine review are approached for assessment. Frailty was assessed with the Edmonton Frail Scale (EFS), cognitive impairment with the Montreal Cognitive Assessment (MOCA), treatment satisfaction with the Renal Treatment Satisfaction Questionnaire (RTSQ) and symptoms with the Palliative Outcome Scale-Symptom Renal (POS-S Renal). Data was collected via direct patient interviews and assessments as well as a chart review.

Results: From September 2019, of the 17 patients currently receiving 2-exchange aCAPD, results have been collected from 41% (N=7) to date. The mean age is 82 years (range77-88) and 29% are male. 43% are diabetic. Figure 1 demonstrates the high number of co-morbidities in the population. Only 1 patient had previously received renal replacement therapy in the form of CAPD prior to switching to aCAPD. The mean time on 2-exchange aCAPD was 11months (range 0-24). 6 patients are receiving 2-exchange aCAPD 5 days a week while 1 patient receives it every day. 57% had at least mild frailty with an EFS of >8/17 (range3-11). 71% had memory impairment with a MOCA <26/30 (range 14-30). The median number of hospital admissions was 1 (range 0-3). 43% have travelled outside of the UK (with family support) since commencing assisted CAPD. 83% reported high satisfaction with treatment with a RTSQ of >55/66 (median 62/66). 57% reported a low symptom score with a POS-S Renal <10/68 with a median of 8 (range 7-27). Pain, lack of energy and poor mobility were the most commonly reported symptoms.

Discussion: Our results demonstrate a frail, elderly population with multiple co-morbidities and memory impairment. Although our population number is small and they are not matched to the assisted PD and HD populations published in the FEPOD study (1) they do compare favourably to both groups in terms of the RTSQ score; median of 62 vs 55 for assisted PD and 62 vs 51 for HD. Our population also compare favourably to both groups in terms of symptoms as measured by the POS-S Renal score; 8 vs 14 for assisted PD and 8 vs 16 for HD.

Conclusions: Patients receiving 2-exchange aCAPD have a high treatment satisfaction and low symptoms score compared to previously published data. Assessment of our programme indicates that 2-exchange could potentially become the dialysis modality of choice for the frail renal patient.