Establishing a PD catheter insertion service by nephrologists – a single centre experience

Dr Ajay Dhaygude¹, Dr Arvind Ponnusamy¹, Dr Beng So¹, Charge Nurse Hector Maclaren¹, Dr Sharmila Bandyopadhyay¹
¹Royal Preston Hospital, Preston, United Kingdom

Introduction
There is a growing recognition that in many UK renal centres, the proportion of patients opting for peritoneal dialysis (PD) is suboptimal. According to 19TH Annual Report of UK Renal Registry Data, in our centre only 16% (Ref:1) opted for PD, the national average being 18%. This led to the creation of a nephrologist led PD catheter insertion service in 2016. Percutaneous Seldinger PD catheter insertion service in day case unit was provided on weekly basis. Outcome data for the years 2018/2019 presented.

Methods
Electronic patient records were used to identify all the patients and collate the data from 2018-2019. Results are presented in line with the Renal Association’s Peritoneal Access (RA) audit criteria.

Results
Sixty-four patients underwent catheter insertion over 2 years. Four (6%) required manipulation within the first month for dysfunction. 39 catheters are still in use. Twelve received transplant, 5 died with a functioning catheter and 8 changed modality to in-centre haemodialysis (ICHD). Reasons for ICHD were: 1 pleuro-peritoneal leak, 1 early exit site infection with leak, 1 chronic exit site infection, 1 tunnel infection, 1 recurrent peritonitis, 1 persistent left hypochondriac pain after starting PD and 2 for technique failure. Our catheter patency rate exceeded the RA audit criteria at 83% (target >80%). One patient experienced bowel perforation (1.5%) target <1%. There were no significant haemorrhagic events (target <1%) and only 1 (2%) exit site infection within 2 weeks of insertion (target <5%).

Table 1.

Discussion
Our previous PD access service was dependent on a small number of surgical colleagues and had limited scope for expansion. We demonstrate that a Nephrologist led service can be established within a short timeframe with limited resources, with outcomes that meet audit criteria set out by the RA and International Society for Peritoneal Dialysis. With timely insertion of PD catheters, our PD programme has expanded from 35 to 50 patients and are able to offer our patients genuine choice of RRT modality. In 2018/19, only 9 patients had surgical insertions. This was either due to patient choice wanting general anaesthetic, or multiple previous surgical interventions especially with midline scars. One patient needed hernia repair as well. Overall, the good outcomes of our service places us on solid foundations for expansion to include acute PD in the near future.