EXPLORING PRECONCEPTIONS IN CHOOSING PERITONEAL DIALYSIS (PD)—PD MYTHS STUDY

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Aim: To determine factors influencing decisions to select peritoneal dialysis (PD) in various clinical scenarios.

Background: PD is an underutilised modality despite few contraindications. Physician attitude towards PD may be an important contributor influencing the decision.

Methods: A global online survey was administered to nephrologists and trainees. Ethics approval was granted by the University of Alberta, Canada. Participants provided informed consent and data were analysed descriptively using the statistical software Stata.

Results: The survey was completed by 645 participants (80.9% nephrologists and 19.1% trainees) from 54 countries, with 65.6% of respondents from high-income countries. PD was recommended for patients desiring pregnancy; weightlifters; in polycystic kidney disease; in cirrhotic patients; in chronically immunosuppressed patients; and for urgent dialysis. Respondents were more likely to offer PD to patients with pets if they had separate rooms. However, respondents from low-income countries were more likely to offer PD (75%) without a separate room compared with high-income country respondents (48.6%). Most participants indicated they would not offer PD following laparotomy or hemicolectomy. However, nephrologists and respondents from PD units offering ambulatory services were more likely to offer PD in these cases. Respondents from larger units were more likely to offer PD following radiotherapy for ovarian cancer. The provision of PD to obese patients was associated with income-status of the country, with 75% of respondents from low-income countries not offering PD compared with 21.5% of respondents from high-income countries.

Conclusions: Physician attitudes towards the provision of PD across certain clinical scenarios may be shaped by clinical experience, with differences in responses observed according to income, profession, the size of PD units and experience working in ambulatory PD units.

INCIDENCE AND TREATMENT OF PERITONITIS DUE TO ROTHIA SPECIES IN PATIENTS ON PERITONEAL DIALYSIS IN AUSTRALIA AND NEW ZEALAND

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Aim: Our study aims to examine the incidence, treatment, and outcomes of peritonitis due to Rothia spp. in patients on peritoneal dialysis (PD) in Australia and New Zealand.

Background: PD-associated peritonitis remains a severe complication of PD. Although PD-associated peritonitis due to Rothia spp. is rare, the treatment recommendations and outcomes are uncertain.

Methods: Using data from the Australia and New Zealand Dialysis and Transplant Registry, all PD patients who developed peritonitis due to Rothia spp. between 2011 to 2020, were included and analysed.

Results: Of the 20 653 episodes of peritonitis, only 28 (0.14%) episodes were caused by Rothia spp. Of these, 17 (60.7%) episodes were caused by Rothia mucilaginosa, 5 (17.9%) episodes by Rothia dentocariosa. In 6 (21.4%) episodes, the species was not specified. Twenty-two episodes were treated with a single antibiotic regimen [vancomycin (57.1%), cefazolin (14.3%), amoxicillin (3.6%) and amoxicillin/clavulanate acid (3.6%)], while 6 episodes were treated with a combination antibiotic regimen [ceftazidime/vancomycin (10.7%), cefazolin/gentamicin (3.5%), flucloxacillin/ciprofloxacin (3.5%), and gentamicin/vancomycin (3.5%)]. The median (IQR) duration of antibiotic therapy was 2.1 (1.9–2.9) weeks. All peritonitis episodes caused by Rothia mucilaginosa peritonitis had complete cure, while episodes caused by Rothia dentocariosa and where Rothia spp. was not specified had complete cure in 80% and 33% of the cases, respectively. While no deaths within 30-days of developing peritonitis were reported, catheter removal was reported in 2 (7.1%).

Conclusions: PD-associated peritonitis due to Rothia spp. is uncommon and associated with relatively good outcomes.

CLINICAL OUTCOMES OF PATIENTS WITH KIDNEY FAILURE TREATED WITH INCREMENTAL PERITONEAL DIALYSIS

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COSTS OF INCREMENTAL AND FULL-DOSE PERITONEAL DIALYSIS: A MICRO-COSTING ANALYSIS

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Aim: To describe the short-term outcomes of patients prescribed incremental peritoneal dialysis (PD).

Background: Despite being commonly practiced in other countries, there is limited evidence on the outcomes of patients treated with incremental PD (less than 8 L of dialysate a day).

Methods: We included all incident patients treated with incremental PD between June 2019 and May 2021 in Western Renal Service, NSW. Demographics, clinical and safety data on the initiation of incremental PD were collected. Details of PD prescriptions and adequacies were recorded at 6, 26, 52, and 78 weeks. Linear mixed models were used to assess the trajectory of dialysis adequacy (total and residual Kt/V) over time.

Results: Of the 204 incident patients, 123 (60%) were prescribed incremental PD (66% male, 46% had diabetes as primary cause of kidney disease, 52% Caucasian, 46% aged 60–75 years). At baseline, the mean (95%CI) eGFR was 9 ml/min (8–9), with mean (95%CI) residual Kt/V of 2.7 L/Week/1.73m² (2.3–3.0). Of these, 36 (29%), 30 (24%) and 57 (46%) patients were prescribed 1, 2 and 3 exchanges per day. Interaction with time was observed for total Kt/V (p = 0.001) and not residual Kt/V (p = 0.55), indicating the slope of total Kt/V decline over time but not residual Kt/V (Figure 1). The predicted decline in total Kt/V was 0.14/month. During follow-up, 50 prescriptions were modified, and 18 patients progressed to full dose PD. The median time to full dose PD was 264 days (IQR: 197). 31 (25%), 11 (9%) and 30 (24%) patients experienced exit site infections, peritonitis, and technique failure.

Conclusions: Incremental PD is feasible and may preserve residual kidney function in a selected cohort of patients with kidney failure.

Background: Incremental peritoneal dialysis may preserve residual kidney function (RKF), allow tailored dialysis prescriptions, and ensure better adaptation to dialysis. The financial impact and resource use in a public hospital setting have not been quantified.

Methods: We undertook a micro-costing analysis of incremental and full dose PD from June 2019 to May 2021, using data from the Western Renal Service, NSW. Total costs for both modalities (admissions, consumables, clinical reviews, and pathology investigations) were included, and reported in 2021 Australian dollars.

Results: The study included 204 patients (123 incremental and 81 full dose). 68% were male and 48% had diabetes as primary disease. The mean (95% CI) baseline eGFR (ml/min) and KRF (L/Week/1.73 m²) for the incremental and full dose groups were 9 (8–9) and 6 (6–7), and 2.7 (2.3–3.0) and 1.0 (0.7–1.2), respectively. The cumulative (95% CI) costs including admissions and provision of PD were $14 604 (12253–16 954) per patient for incremental and $20 641 (16850–24 431) for full dose. The monthly (95% CI) cost for provision of PD outpatient services was $1241 (1104-1379) and $1581 (1487–1674) respectively, with an overall cost-saving of $340 per patient per month. Consumables accounted for 65% ($810, 780–840) of the monthly cost for incremental compared to 75% ($1, 190, 1159–1222) for full dose. Incremental PD accrued additional monthly costs for clinical and safety data on the initiation of incremental PD were collected. Details of PD prescriptions and adequacies were recorded at 6, 26, 52, and 78 weeks. Linear mixed models were used to assess the trajectory of dialysis adequacy (total and residual Kt/V) over time.

Conclusions: The main driver for the cost-difference between incremental and full-dose PD was lower usage of consumables by incremental PD. Incremental PD for suitable patients is likely to result in significant cost savings for hospitals.

TRANSPLANTATION

LOWER ACCESS TO AND POORER OUTCOMES OF KIDNEY TRANSPLANT AMONG ABORIGINAL AND TORRES STRAIT ISLANDER CHILDREN AND YOUNG ADULTS: RESULTS FROM THE ANZDATA REGISTRY

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Aim: We aimed to describe the patterns of transplant access and outcomes among Aboriginal and Torres Strait Islander Children and Young adults (ATCYA) and other children and young adults (OCYA) of Australia.

Background: Access to kidney transplant and transplant outcomes for ATCYA have not been investigated in detail.

Methods: Data on Australian patients who commenced RRT at ≤24 years of age from 1963 to 2020 was extracted from the Australian and New Zealand Dialysis and Transplant Registry (ANZDATA). Primary outcomes were patient survival on RRT, time to

ABSTRACTS