

Factors relating to Peritoneal Dialysis drop out - Results from a single centre

Roderick Prawiradiradja, Boyang Liu, Jyoti Baharani

Background

Peritoneal dialysis (PD) has been in use world-wide for the last 3 decades but its prevalence as a dialysis option remains low. In our centre, less than 20% patients choose PD as a modality option.

This study examines the PD dropout rate at our urban centre, situated in an ethnically diverse and economically challenged area.

Methods

All patients who were commenced on PD from 2002 to 2012 were included.

Patients were excluded if they transferred to a different dialysis centre during the study period.

We looked at patient demographics, clinical history, biochemical parameters and PD related complications.

Results

193 patients (table 1) were included in this study. The outcome of these patients are shown in diagram 1. More than half of the patients dropped out during the first year. By year 3 only 16 patients remained on PD.

Total	193
Male:Female	120 : 73
Mean age	56 ± 16 years
Diabetic	28%
Non-Caucasian	23%
Charlson's Comorbidity Index	
- Low	- 67 (35%)
- Medium	- 91 (47%)
- High	- 35 (18%)

Table 1. Patient demographics

The proportions of patients transplanted and switched to haemodialysis in non-Caucasian population were 8.9% and 88.9% respectively, compared to 8.9% and 77.7% in Caucasians (p=0.84).

Patients who switched to HD tended to be younger, non-Caucasian and diabetic than those who were transplanted or died. The three main reasons for PD discontinuation were fluid overload because of ultrafiltration failure or poor compliance with salt and fluid restrictions (40%), peritonitis (30%), and preference of the physician, patient, or family (6%).

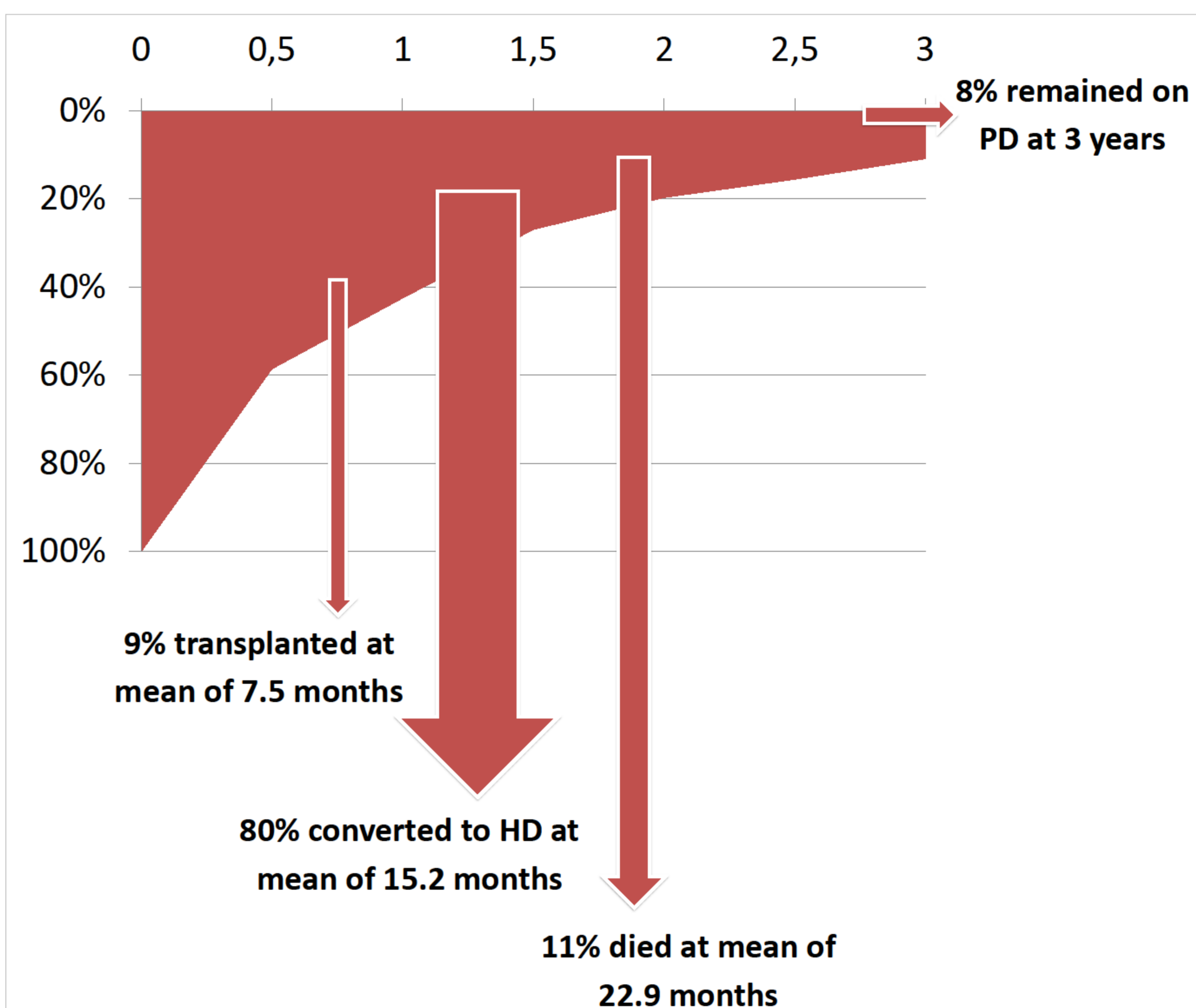


Diagram 1. Peritoneal Dialysis drop out rate

Outcome	Patients	Diabetic	Age	Non-Caucasian
Transplant	17	5	56	4
Death	21	7	65	1
Dialysis	155	43	54	40
Total	193	55	58	45

Table 2. Patients stratified by ethnicity and modalities

Conclusions

- Our centre has a higher than average rate of PD drop out compared to other centres.
- More than 50% of patients switched to HD within a year of starting PD.
- The small size of our PD programme and the free availability of HD has lowered the incentive for patients to remain on PD.
- Enhanced education of both patients and staff may be a way to change this in the future.