

Comparison of peritoneal dialysis and hemodialysis survival in elderly patients



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Background

The elderly dialyzed population is growing in Japan. However, little is known about the prognosis of this population.

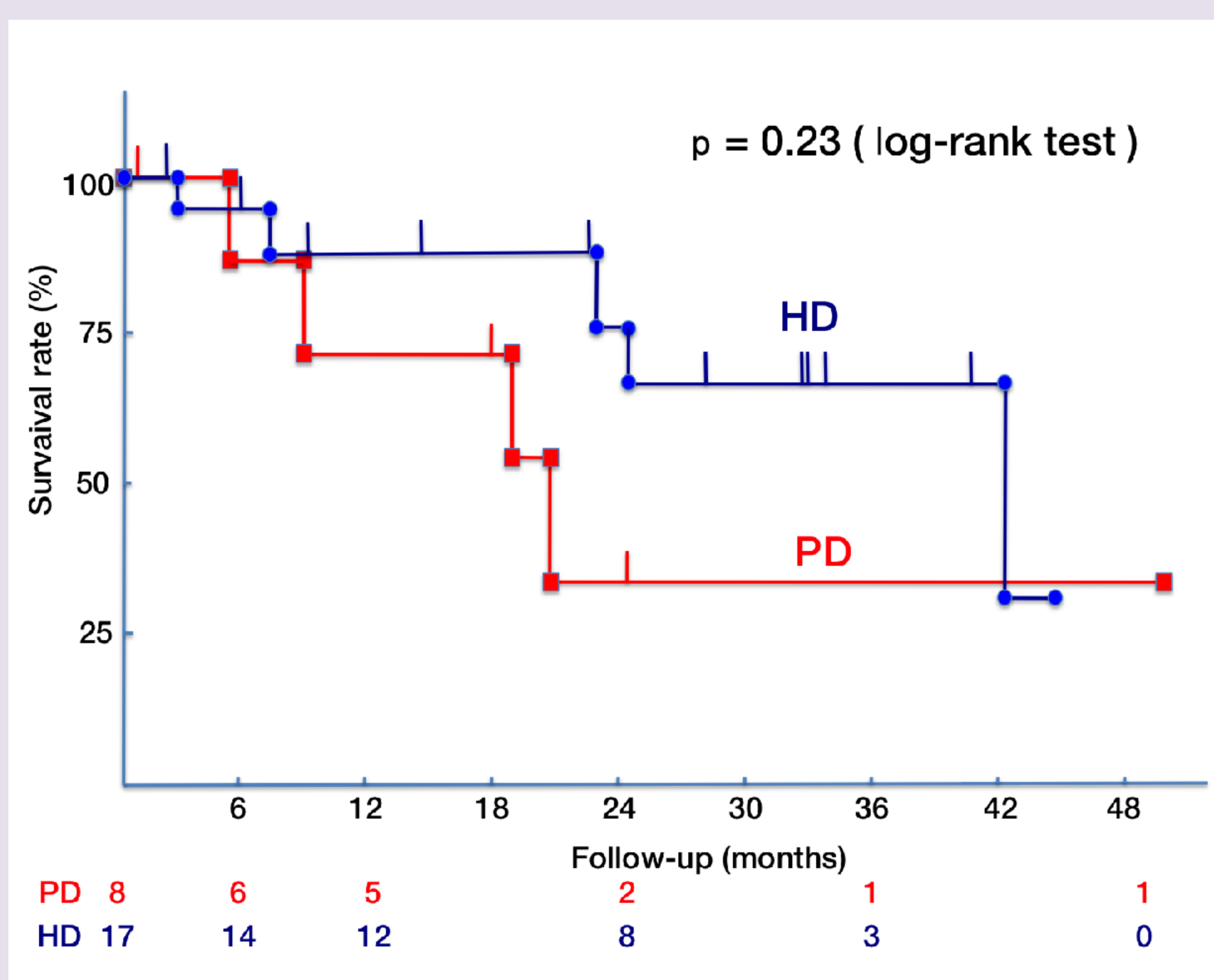
Aim

Our aim was to compare the survival of peritoneal dialysis (PD) and hemodialysis (HD) patients older than 85 years at the introduction of dialysis.

Method

Eight PD and seventeen HD patients were enrolled in the survey (mean : old, max : 94 years old) who started renal replacement therapy (RRT) between 1 January 2010 and 31 December 2014. The survival rates were calculated using the Kaplan–Meier method and compared by the log-rank test.

Result



No statistically significant differences in survival rates between PD and HD patients were observed.

Baseline Characteristics of Study Population

	PD : 8	HD : 17	P Value
Age (y)	87.4 ± 3.1	87.2 ± 2.8	0.915
Male (%)	25	35	0.606
CCI*	4.1 ± 1.6	3.2 ± 1.6	0.199
BMI (kg/m ²)	21.8 ± 2.8	22.5 ± 3.5	0.612
eGFR (mL/min)	6.0 ± 1.8	5.7 ± 1.4	0.684
sAlb (g/dL)	3.5 ± 0.5	3.5 ± 0.5	0.696
Hb (g/dL)	8.9 ± 1.5	9.8 ± 0.9	0.176
T-Chol (mg/dL)	184.5 ± 23.2	192.5 ± 41.5	0.542
CRP (mg/dL)	0.47 ± 0.56	0.33 ± 0.25	0.533
UP** (g/gCr)	2.6 ± 0.9	3.9 ± 3.0	0.137

CCI* : Charlson Comorbidity Index

UP** : Proteinuria

Patients who died during follow-up

	Age at Start (years)	Cause of Death	Duration of RRT (months)
PD	1	Cerebral Infarction	5.4
	2	Cerebral Hemorrhage	19.3
	3	Peritonitis	8.8
	4	Pneumonia	20.7
HD	1	Unknown	23.1
	2	Sepsis	43.4
	3	Sepsis	24.4
	4	Heart Failure	8.9
	5	Cerebral Hemorrhage	2.5

Conclusions

Although there are no survival differences between PD and HD patients over 85 years at the start of dialysis, the number of subjects is small. Further studies are needed to evaluate not only the length of survival but also QOL and cost-effectiveness in large population of elderly dialysis patients.

