

Survival of peritoneal dialysis technique and patients

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Introduction

Peritoneal dialysis (PD) is an optimal renal replacement therapy for patients with residual kidney function.

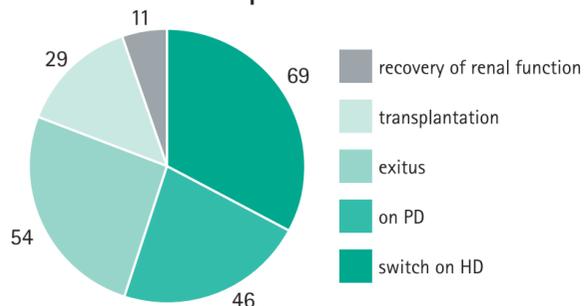
Objective

Objective to study survival of the PD technique and patients treated initially with PD as a renal replacement therapy.

Patients, method

From 2000 to 2014 we had 209 patients treated with PD (101 women and 108 men). Course of illness [improved renal function, kidney transplantation (Tx), conversion to haemodialysis (HD), exitus] time spent in PD and survival in different patient groups were examined.

Outcome of 209 PD patients



Outcome of the 163 patients who dropped out of PD (mean + SD)

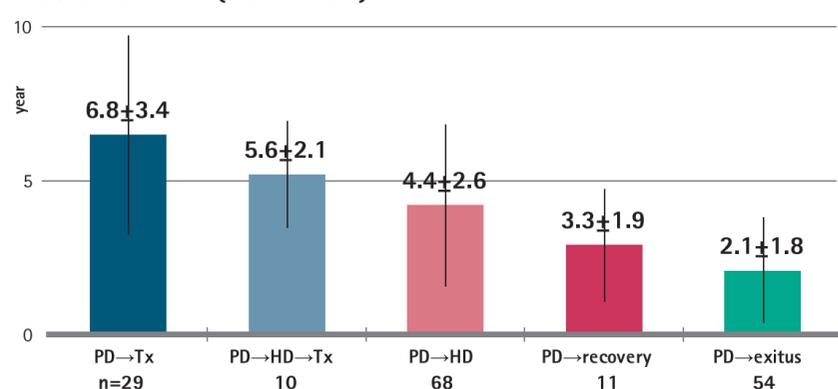
	patients	age at start of PD (year)	time spent in PD (year)	survival after PD (year)	total survival (year)
total	163	60.9±14.2 (17-91)	2.2±1.9	1.6±2.4	3.8±2.9
switch on HD	69	59.9±14.9 (19-82)	2.6±2.2	1.7±1.7	4.3±2.6
transplantation	29	49.5±13.4 (17-70)	2.1±1.6	4.4±3.6	6.5±3.2
exitus	54	67.7±9.7 (46-91)	2.1±1.7	—	2.1±1.7
recovery of renal function	11	65.3±10.1 (41-79)	1.3±1.2	1.6±1.9	2.9±1.8

Results

At the end of the study 46 (22%) patients were treated with PD, 163 patients were dropped out: 11 patients had improved kidney function, 29 were transplanted, 69 (33%) patients got into HD, 54 (26%) had died.

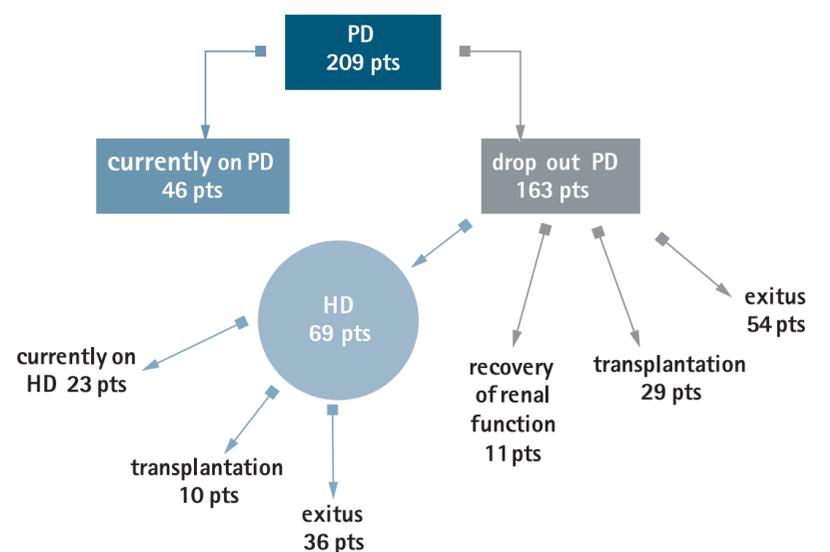
Survival of the PD technique is 2.6±1.7 years in case of patients treated with PD currently and that of dropped patients is 2.2±1.9 years, respectively. The longest technical survival (2.5±2.1 year), was observed in case of patients who got into HD program. According to the patients' survival the best result (7.8±2.3 years) was observed in PD→HD→Tx group, the second best group was the transplanted (Tx) group (7.7±3.4 years). In patients treated initially with PD currently with HD, the average survival is 5.7±3.0 years. The shortest survival (2.1±1.7 years) was detected in patients who died in the PD program.

Patients' survival (mean + SD)



Age and gender distribution amongst the 209 PD patients treated between 2000–2014 (mean + SD)

	patients	age at start of PD (year)	time spent in PD (year)	total survival (year)
total	209	62.1±14.3 (17.5-91.5)	2.3±1.9	4.1±3.1
women	101	62.3±14.7 (17.5-86.5)	2.3±1.9	4.1±3.2
men	108	61.6±13.7 (17.5-85.0)	2.3±1.8	4.1±2.9



Outcome of patients who switched from PD to HD (mean + SD)

	patients	age at start of PD (year)	time spent in PD (year)	survival after PD (year)	total survival (year)
total	68	59.7±14.4 (19-82)	2.6±2.1	1.6±1.7	4.2±2.6
HD → trans-plantation	10	40.8±16.2 (23-65)	2.7±1.1	2.5±1.7	5.2±1.7
HD → exitus	36	66.6±8.5 (49-82)	2.5±2.2	0.9±1.1	3.4±2.3
currently on HD	23	55.8±14.5 (19-75)	2.5±2.2	2.5±1.8	5.0±2.8

Patient currently in dialysis (mean + SD)

	patients	age at start of PD (year)	time spent in PD (year)	survival after PD (year)	total survival (year)
total	68	62.7±14.9 (19-86)	2.6±1.9	2.6±1.7	5.2±3.2
PD	46	66.0±13.7 (32-86)	2.6±1.7	—	2.6±1.7
HD	23	55.8±14.5 (19-75)	2.5±2.2	2.5±1.8	5.0±2.8

Summary

The survival of the PD technique was average 2.2 ±1.9 (0.2–9.5) years in different patient groups. Where renal function improved (1.3±1.2 years) and in case of transplantation (2.1±1.6 years) the duration of the PD program was relatively short.

Patients' survival was average 3.8 ± 2.9 (1.2–11.7) years depending on the course of illness.