

PERITONEAL DIALYSIS IN PATIENTS TRANSFERRED FROM HEMODIALYSIS

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INTRODUCTION AND AIMS

Peritoneal dialysis (PD) and hemodialysis (HD) are complementary modalities for renal replacement therapy. Changes from PD to HD are usual and seen as an integrative care approach for end stage renal patients¹.

However, transferences from HD to PD are less frequent and less characterized.

The aim of this study was to evaluate the outcome of patients transferred from HD to PD, and compare them to those that started dialysis with PD.

POPULATION AND METHODS

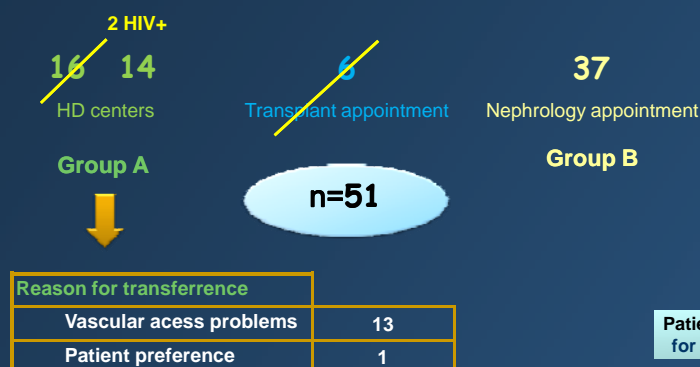
This was a single center retrospective study that included all incident PD patients from May 2005 to November 2011.

We excluded from the study HIV infected patients and allograft failure patients.

Clinical data: age, gender, race, co-morbidities (HCV, diabetes), peritonites, hospitalizations.

Laboratorial data: KTW/V, PET, creatinine clearance (CrCl), albumin, C-reactive protein (CRP).

RESULTS



Mean time in HD (Months)	43.5±27.3
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Laboratorial data after the first month in PD

	Group A	Group B	p
KTW/V	1.9±0.6	1.9±0.6	>0.05
CrCl (ml/min)	1.8±3.9	10.3±2.9	<0.001
Albumin (g/dl)	3.4±0.5	3.6±0.5	>0.05
CRP (mg/dl)	2±2.6	1±1.6	0.02
Malnutrition	57.1%	13.5%	0.02

Patients transferred from HD had lower residual renal function. Albumin was lower, and CRP and malnutrition higher comparing with naive patients

Clinical follow up of the population

	Group A	Group B	p
PD discontinuation	85.7% (12)	1 (2.7%)	0.01
Death	6 (42.9%)	1 (2.7%)	<0.001
Renal transplant	4 (28.6%)	8 (21.6%)	>0.05
HD transference	2 (14%)	16 (43.2%)	0.03
Mean time in PD	26.1±17.7	22.3±20	>0.05

Patients transferred from HD had high rate for PD discontinuation, mainly by death, but also because of renal transplantation, or even HD re-transference.

Clinical characteristics of the population

	Group A	Group B	p
Female gender	57.1% (8)	40.5% (15)	>0.05
Mean age	54.5±17.2	50.2±14	>0.05
White race	92.8% (13)	94.6% (35)	>0.05
HCV +	14.3% (2)	0%	0.02
Arterial hypertension	78.6% (11)	64.9% (24)	>0.05
Diabetes	28.6% (4)	29.7% (11)	>0.05

Patients transferred from HD were older, were mainly females, and had higher prevalence for hepatitis C virus infection. Presence of arterial hypertension was also more frequent.

Clinical follow up (complications) of the population

	Grupo B	Grupo A	p
Peritonites			
Infections/year	1.3	0.8	<0.001
Mean time for 1 st infection	6.9±5	10.8±12.4	0.01
<i>Pseudomonas</i> infection	2	1	>0.05
Hospitalizations			
Number/year	4.1±2.7	1±0.9	0.001
Length (days)	14.8±6.9	5.5±6.2	<0.001

Patients transferred from HD had superior peritonites rate, as well need of hospitalizations, and hospitalization length.

Mortality

In univariate analysis, mortality was associated with history of hemodialysis, time on hemodialysis, malnutrition, CRP and hospitalizations. Residual renal function was also a predictor of mortality.

	r	p
HD first	0.5	<0.001
Time in HD	0.6	<0.001
Residual renal function	-0.6	<0.001
Malnutrition	0.7	<0.001
CRP values	0.4	0.04
Hospitalization length	0.5	0.001

CONCLUSIONS

PD is suitable for patients transferred from HD, extending life time, and allowing for kidney transplantation in some. Mortality rate was higher in this group of patients, being residual renal function a good predictor of survival.

References:

¹- Van Biesen W, Vanholder RC, Veys N, Dhondt A, Lameire NH. Evaluation of an integrative care approach for end-stage renal disease patients. J Am Soc Nephrol 2000; 11: 116-125