

PERITONEAL DIALYSIS IN PATIENTS WITH REFRACTORY HEART FAILURE AND OVERHYDRATION.

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Background and aim

The aim of this study was to evaluate the efficacy of peritoneal dialysis (PD) in the treatment of refractory Heart Failure (HF) in terms of weight loss, hospitalizations, cardiac functional status and technique complications.

Methods

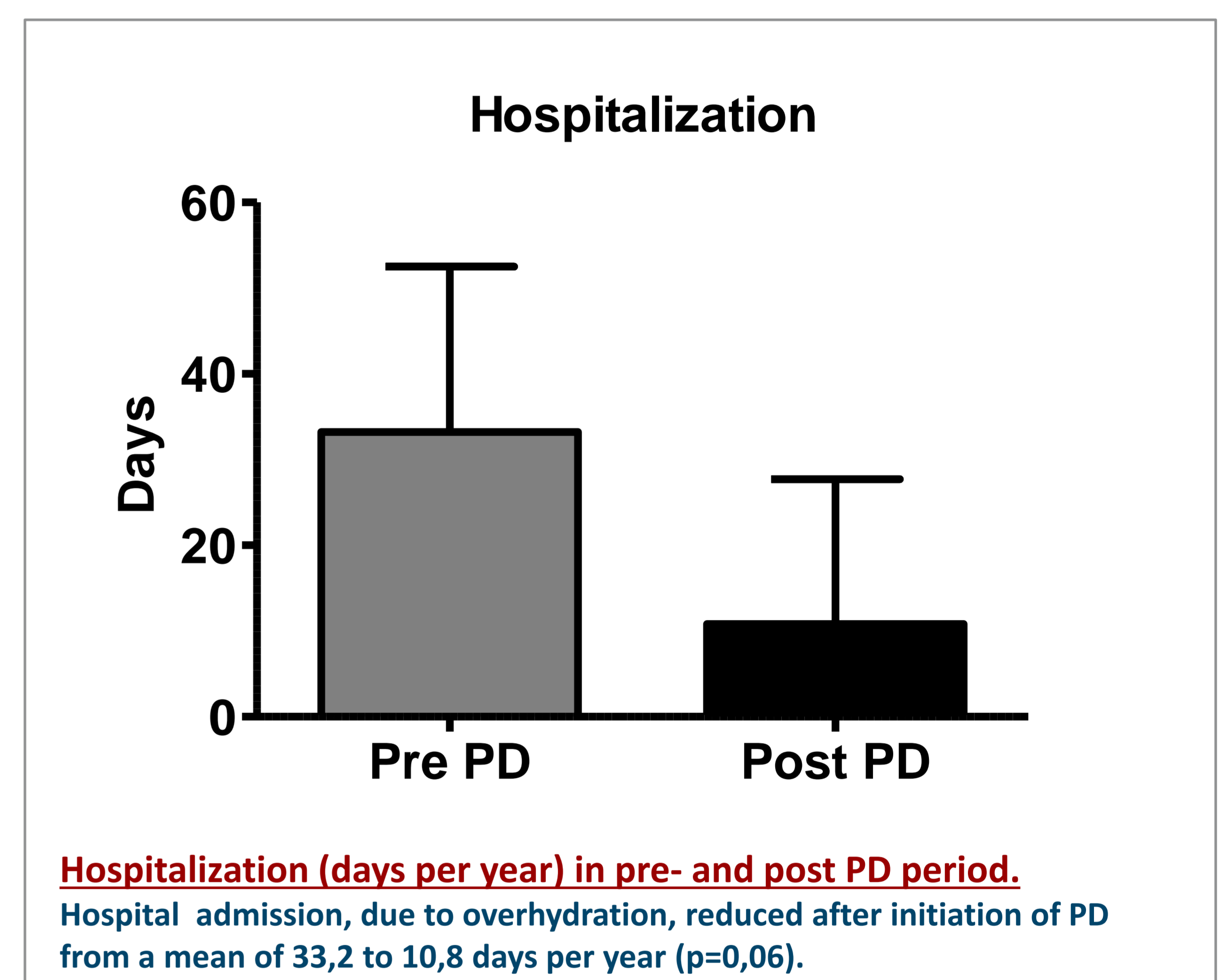
From December 2014 to December 2016, we conducted a prospective non-randomized study involving patients with NYHA class IV HF, who were refractory to maximum treatment with diuretics (loop diuretics, thiazides and MR inhibitors), beta blockers and cardiac resynchronization therapy (in the presence of systolic dysfunction or biventricular dyssynchrony). Common characteristic of these patients were frequent hospitalizations due to overhydration with no advanced chronic kidney disease.

Routine biochemical parameters were recorded before the initiation of the study and after 1, 3 and 6 months of PD treatment. An echocardiogram was performed at baseline and after 6 months. Side effects related to PD were also recorded. Following parameters were monitored: weight, 24h diuresis, peritoneal ultrafiltration, glomerular filtration rate, LVEF and total hospitalization days due to overhydration before and after PD treatment.

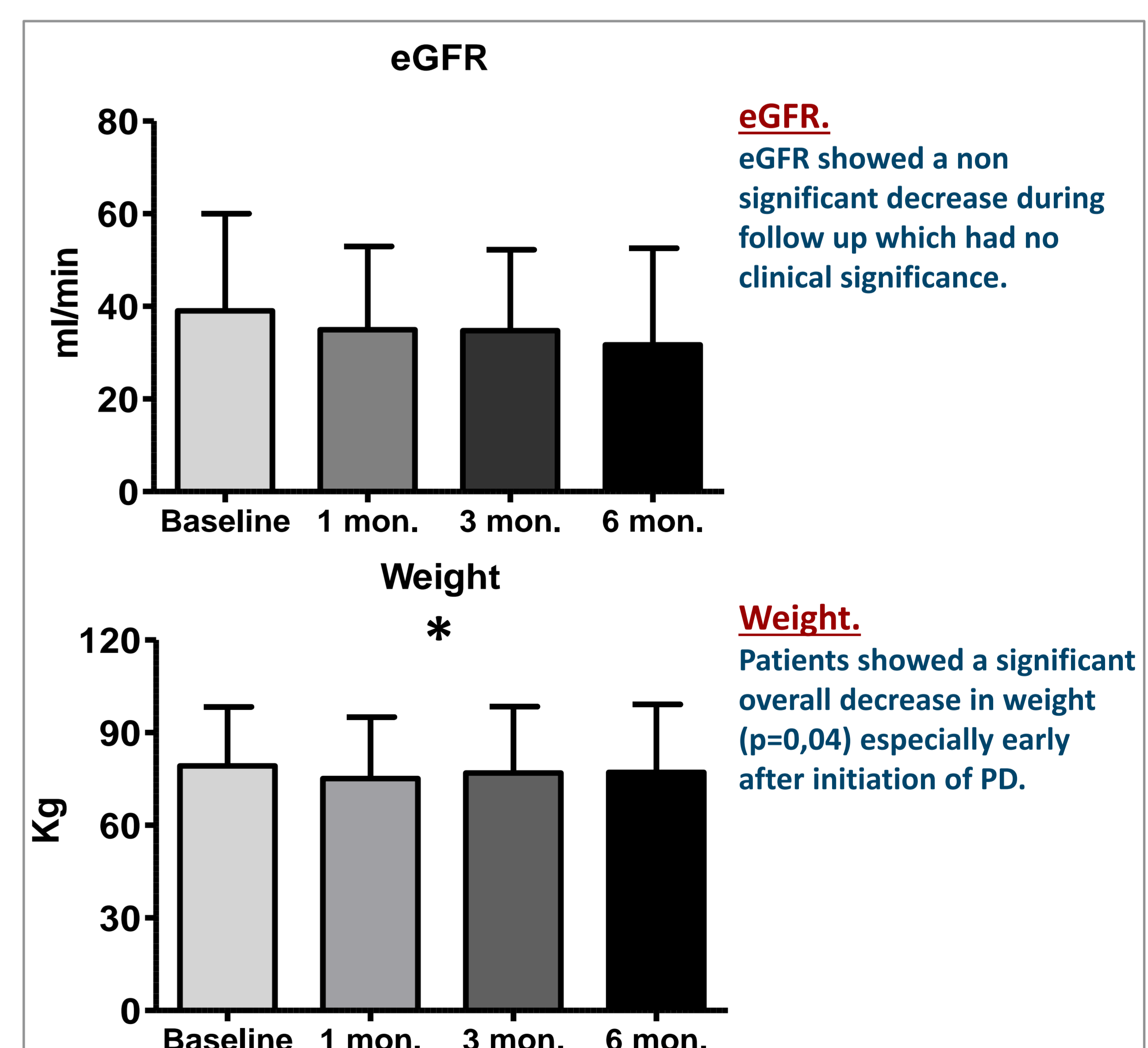
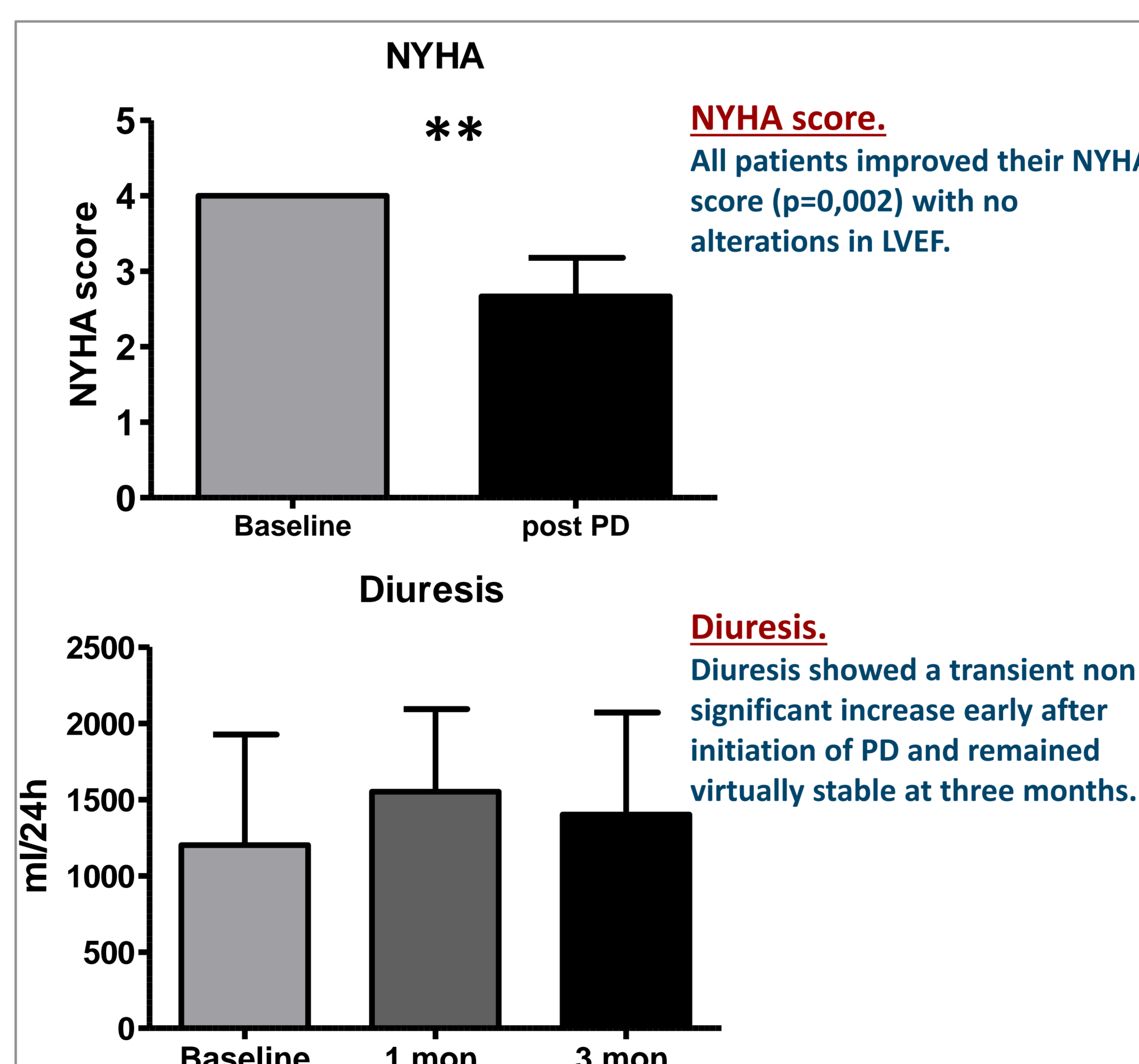
Results

Patients included		Medications (N of patients and %)	
Mean age (years ± SD)	N=6 67,8 ± 14,9	ACEi or ARBs	3/6 (50%)
Gender (M/F)	3 / 3	Beta-blockers	3/6 (50%)
Mean PD duration (months)	12,5 ± 8	Furosemide dose	6/6 (100%) (333 ± 102 mg)
Comorbidities		Thiazides	3/6 (50%)
Diabetes	2/6 (33%)	MR inhibitors	2/6 (33%)
Hypertension	0/6 (0%)	Anticoagulants	2/6 (33%)
Peripheral arterial disease	3/6 (50%)		
Ischemic stroke	1/6 (17%)		

Patients characteristics and comorbidities.



PD modality	
Patient # 1	CAPD – 1 dwell daily
Patient # 2	CAPD – 1 dwell daily
Patient # 3	CAPD – 1 dwell 5 days/week
Patient # 4	NIPD – 7 days/week
Patient # 5	IPD – 3 days/week
Patient # 6	IPD – 3 days/week



Conclusions

- ✓ PD is a safe and well tolerated therapeutic option for patients with refractory HF and overhydration.
- ✓ PD adequately improves NYHA score in a sustainable fashion.
- ✓ PD reduces the need for hospitalization due to overhydration and improves quality of life.
- ✓ Complications are rare (PD catheter dysfunction) with no cases of peritonitis.



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