

PATIENTS OVER 75 YEARS FOLLOWED IN PREDIALYSIS CLINIC. GERIATRIC ASSESSMENT

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INTRODUCTION : In patients older than 75, with chronic kidney disease (CKD) stages 4 and 5, followed in pre-dialysis clinic, is important consider, which patients could benefit from treatment with dialysis, Intention to treat with dialysis (ITD), and which patients would be better with Conservative Care (CC).

Objective: The aims of the study were: the assessment and follow up patients, introducing geriatric concepts including frailty, and identify factors that could help us make decisions about treatments.

METHODS: The study was performed in 56 patients (29M/27F) older than 75 years, the median time of follow were 25 months (12-48). At baseline we analyzed: the phenotype of frailty, defined by Linda P Friend (1), Age, Comorbidity Charlson Score not adjusted to age, creatinine (cr), creatinine clearance (CrCl), dependence for activities of daily living (ADL), cognitive impairment (CI), depression, cardiovascular disease, and diabetes. With this assessment and in accordance with the patients and families, we classified patients on CC, and patients with ITD.

In a prospective longitudinal study we evaluate clinic and laboratory parameters and re-evaluate the frailty.

RESULTS:

Table 1. Baseline clinical features in patients grouped by option of treatments.

Nº Patients	CC N= 20	ITD N= 36	p
Age (years)	83 ± 4,43	78 ± 4,38	0,001
Cr (mg/dL)	2,8 ± 0,78	3,33 ± 0,86	0,061
CrCl (ml/min)	17,26±4,87	19,44±6,24	0,234
No- Frail (%)	2 (10)	26 (72,2)	0,000
Pre-Frail (%)	18 (90)	10 (27,8)	0,000
Charlson Index Score	4 (2-6)	4 (2-7)	0,332
Dependence (ADL)(%)	16 (80)	7 (19,4)	0,000
Vascular disease (%)	8 (40)	18 (50)	0,471
Cardiac disease (%)	10 (50)	19 (52,8)	0,842
CI (%)	9 (45)	2 (5,6)	0,000
Depression (%)	6 (30)	4 (11)	0,077
Diabetes (%)	6 (30)	23 (63,9)	0,015

Table 2. Factors affecting election of CC treatment.

Independent variable	OR	(CI) 95%	p
Pre-frailty	23	(4,57- 119,76)	0,000
Age (years)	1,28	(1,104-1,50)	0,001
Cognitive Impairment	13,9	(26-74,35)	0,002
Dependence (ADL)	16,57	(4,2-65,3)	0,000
Charlson score	0,807	(0,50-1,28)	0,366

In multivariable logistic regression

analysis: Age and prefrailty remained as independent predictors of the choice of CC.

Table 3. Clinical and biochemical parameters during follow-up.

Variable	CC N=20	ITD N=36	p
Follow-period (months)	19(12-37)	36(24-59)	0,034
Weight Loss(Kg)	4 (2-6)	5 (2-10)	0,404
Cr (mg/dL)	3,23±1,06	4,37 ±1,3	0,002
CrCl (ml/min)	17,6±6,36	15,2±7,1	0,217
CRP (mg/L)	3 (1- 6,75)	10(4,5-25)	0,004
Albumin (g/dl)	3,87±0,43	3,9±0,29	0,698
Transferrin (mg/dl)	195±46	209±40	0,598
Cholesterol (mg/dl)	200,5±50	158 ±29	0,010
Tt. Statins (%)	8(24)	25(76)	0,015
25(OH)vitamin D ng/mL	17,5 (9-28)	18,4 (10-20)	0,711
Proteinuria (g/24h)	0,54 (0,20-0,93)	0,95 (0,38-2,39)	0,038
Hemoglobin (gr/dl)	12,9±0,9	12±1,2	0,018
Erythropoietin UI/week	2000(1000-4000)	4000(2000-5000)	0,118
Hospitalizations (%)	16 (80)	17 (47)	0,017
Admission/pts/months	0,06	0,022	0,670
Death (%)	5 (25)	6 (17)	0,452
No- Frail (%)	1 (5,3)	18 (94,7)	0,001
Pre-frail(%)	9 (37,5)	15 (62,5)	0,809
Frail (%)	10 (76,9)	3 (23,1)	0,000

Comparative study: Patients with ITD, were more inflamed, there were no differences in nutritional biomarkers, albumin and transferrin, except cholesterol levels, but more patients were in treatment with statins. The patients on CC: had lower creatinine and proteinuria levels and the Hb was higher, with the same amount of erythropoietin per week. CC patients, had more hospitalizations. In survival analysis there were no significant differences between CC and ITD patients.

References:

- (1) Fried LP, et al. Frailty in Older Adult: Evidence for a Phenotype. J Geronto A Biol Sci Med Sci 2001; 56(3):146-156.
- Tamura MK, et al. Optimizing renal replacement therapy in older adults: a frame work for making individualized decisions. Kidney Int 2012; 82:261-269.
- Morton R L, et al. Factors influencing patient choice of dialysis versus conservative care to treat end-stage kidney disease. CMAJ 2012; 184 (5) : 277- 283.

CONCLUSIONS: The state of frailty in the elderly patients with CKD, stages 4 and 5, lead to nephrologists to make decisions about treatment. Conservative treatment may be a good option in the aging populations.

