



Prevalence and factors associated with frailty in end-stage renal disease patients under online-haemodiafiltration

Pedro Martins, RN, Fresenius Medical Care, NephroCare Maia, Portugal

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Presentation outline

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Introduction (1/4)

Frailty is a multidimensional condition reflecting the decline in health and functioning observed in the elderly population, ultimately resulting in increased risk of disability, falls, hospitalisation, institutionalisation, and death (1).

Screening criteria (2):

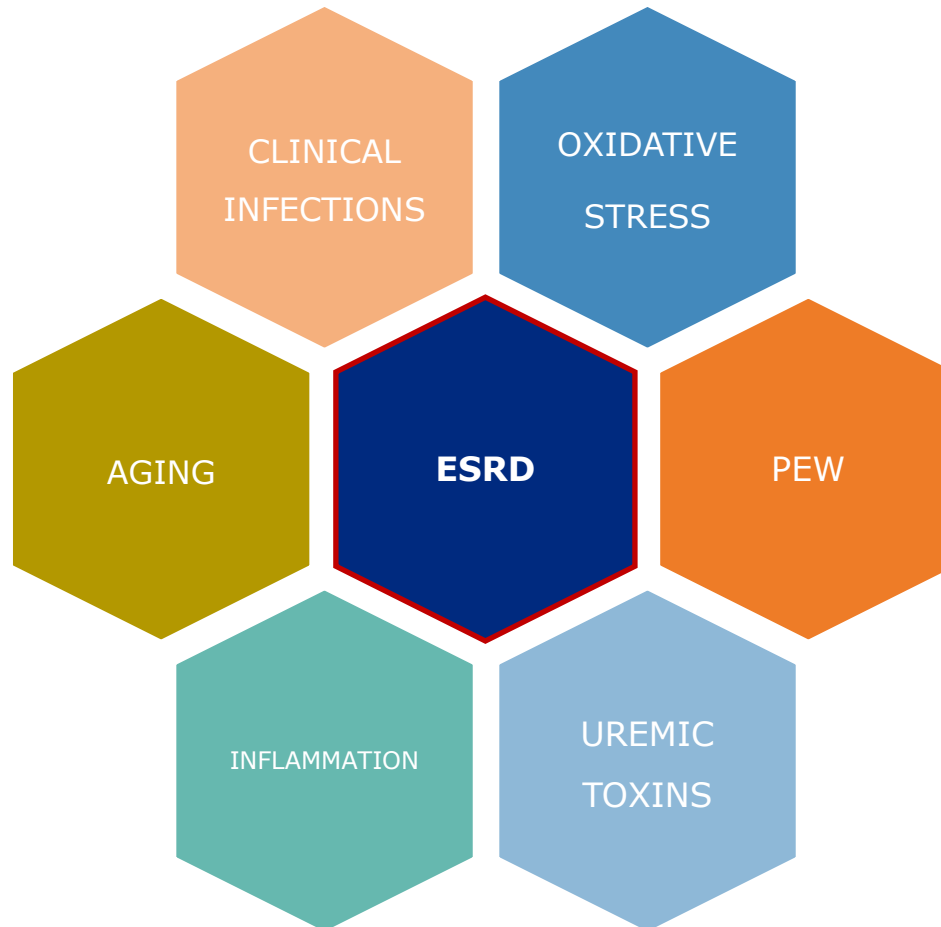
1. Weight loss
2. Muscle weakness
3. Fatigue or exhaustion
4. Low physical activity
5. Slow gait



**3 or more:
Frailty
phenotype**

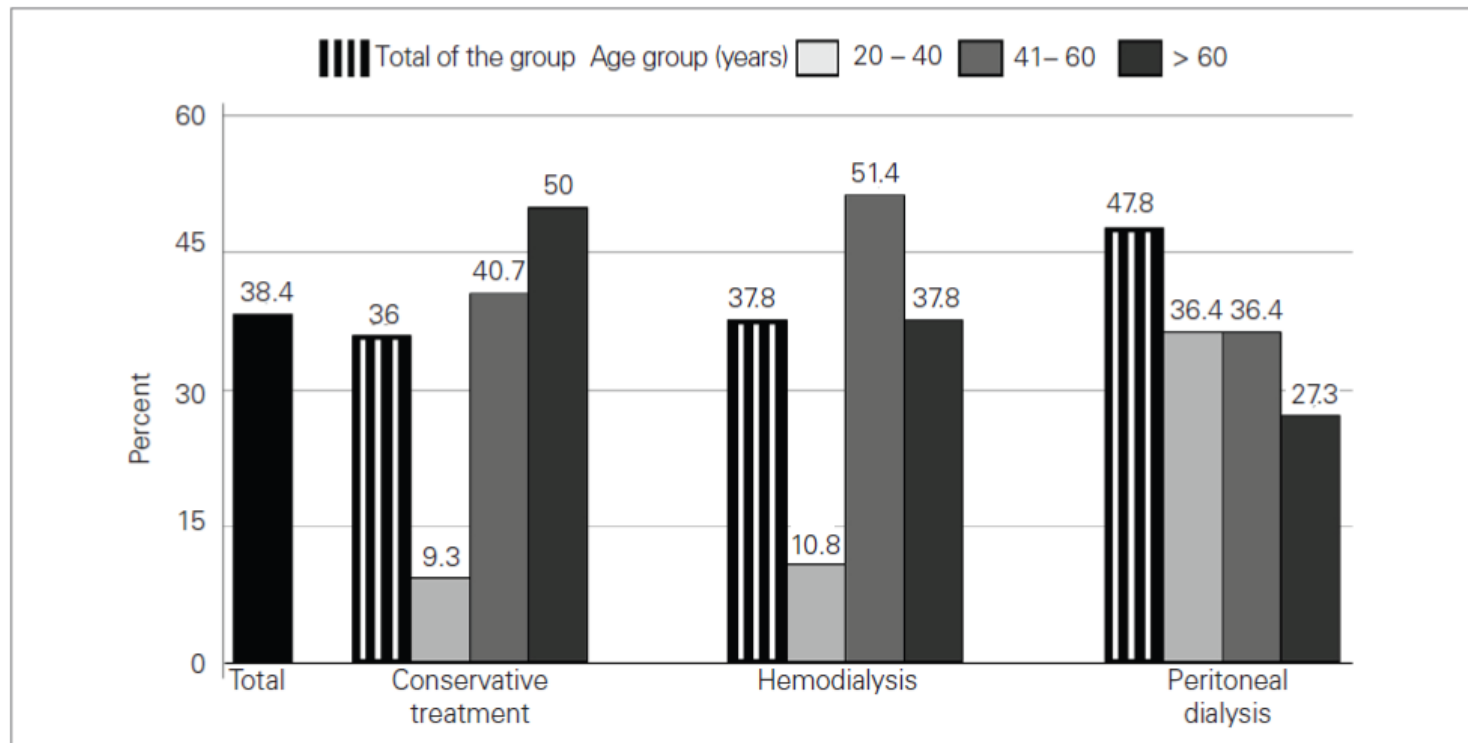
Introduction (2/4)

Figure 1 – Factors contributing to frailty in ESRD patients



Introduction (3/4)

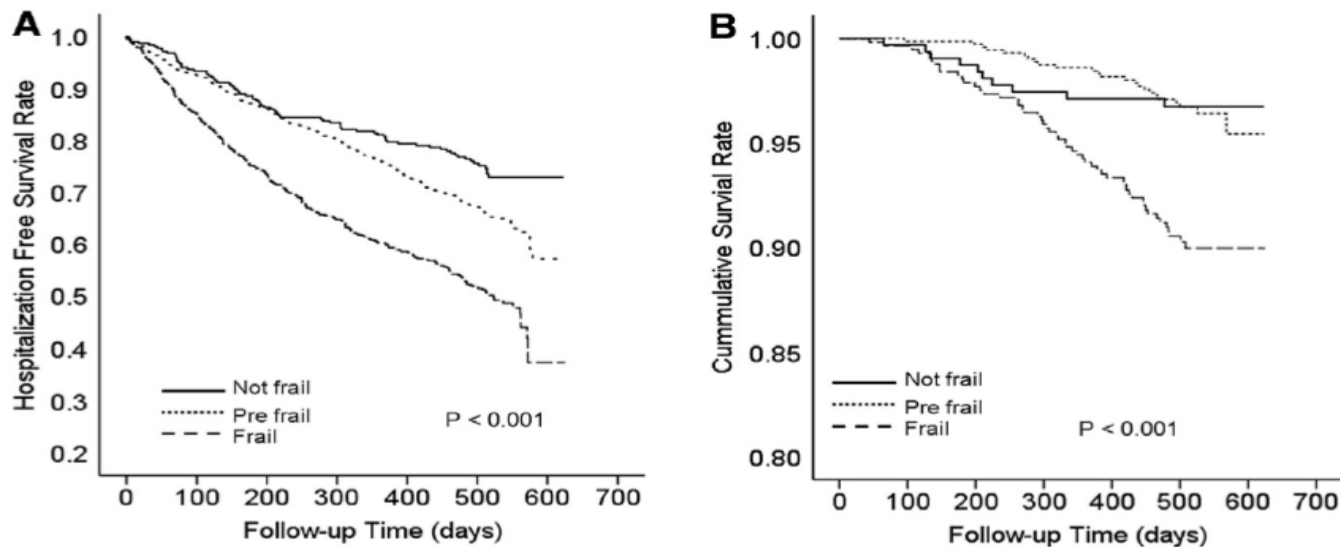
Figure 2 – Prevalence of frailty in ESRD patients by treatment and age



Mansur et al. - **Prevalence of frailty in patients with chronic kidney disease on conservative treatment and dialysis.** J Bras Nefrol 2012;34(2):153-160

Introduction (4/4)

Figure 3 – Frailty in relation to: A) Hospitalisation-free survival probability and (B) Cumulative survival probability



Lee et al - **The Prevalence, Association, and Clinical Outcomes of Frailty in Maintenance Dialysis Patients.** Journal of Renal Nutrition, Vol 27, No 2 (March), 2017

To evaluate the prevalence of frailty and its association with sociodemographic, clinical, and biochemical markers

Methods

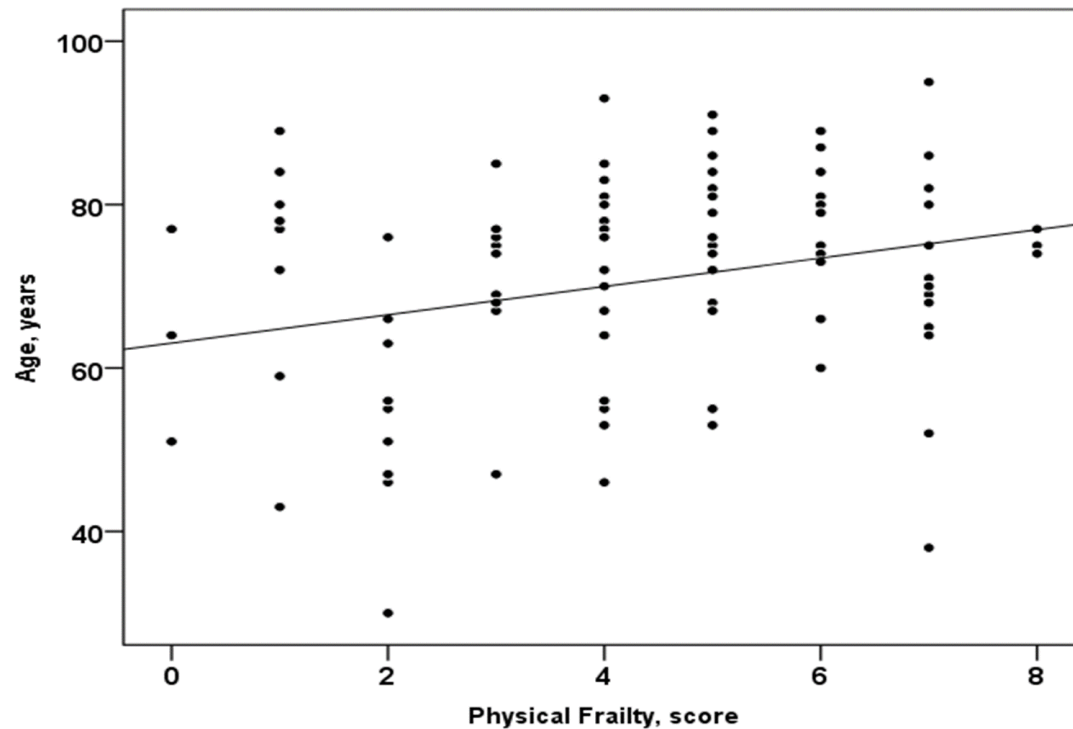
- Cross-sectional study
- 97 ESRD patients on dialysis at the NephroCare Maia Clinic, Portugal
- 39.2% males; 69.86 ± 14.03 years old
- Tilburg Frailty Indicator (TFI): Physical, psychological, and social domains [4]
- Correlations:

Sociodemographic variables and comorbidities, duration of dialysis, haematological, iron status, dialysis adequacy, nutritional and inflammation markers

Results (1/2)

- 62.8% of the patients presented a frail condition
- Higher prevalence in women (male: 45,5%, female: 72%, $p=0,021$)

Figure 4 - Weak positive correlation of physical frailty and age ($r=0.271$, $p=0.009$)



Results (2/2)

Table 1 – Multiple regression analysis

	Unstandardized Coefficients		Standardized Coefficients	t	
	B	Std. Error	Beta		
(Constant)	8.409	1.879		4.475	
Civil Status	1.611	.633	.260	2.547	p=0,013
Two or more chronic diseases	- 1.939	.646	- .302	-3.001	p=0,004
Eligible for renal transplant	- 1.349	.648	- .209	-2.083	p=0,040

Conclusions

- Frailty is a highly prevalent condition in ESRD patients on dialysis
- More than biochemical biomarkers, clinical and psychosocial determinants explain the presence of frailty in this population
- Identification of frailty in patients with ESRD underline the necessity of interventions to preserve their independence, quality of life, and survival
- There is a variety of instruments to assess frailty limiting comparability with other studies.

**Thank You Very Much
for Your Attention!**

Acknowledgments

Leonilde Amado

**Head Nurse
Fresenius Medical Care, NephroCare Maia
Maia - Portugal**

João Barros

**RN
Fresenius Medical Care, NephroCare Maia
Maia - Portugal**

João Fazendeiro

**Country Nursing Director
Fresenius Medical Care, NephroCare Portugal
Porto - Portugal**

References

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5. Lee et al - The Prevalence, Association, and Clinical Outcomes of Frailty in Maintenance Dialysis Patients. Journal of Renal Nutrition, Vol 27, No 2 (March), 2017