



# Interdisciplinary approach to hyperphosphataemia treatment adherence in haemodialysis patients

**António Saraiva**, RN, Fresenius Medical Care, NephroCare Coimbra, Portugal

46<sup>th</sup> EDTNA/ERCA International Conference | Krakow | Poland | 9-12 September 2017

# Presentation outline

**1** Introduction/Objectives

**2** Methods

**3** Results

**4** Conclusions

# Introduction/Objectives

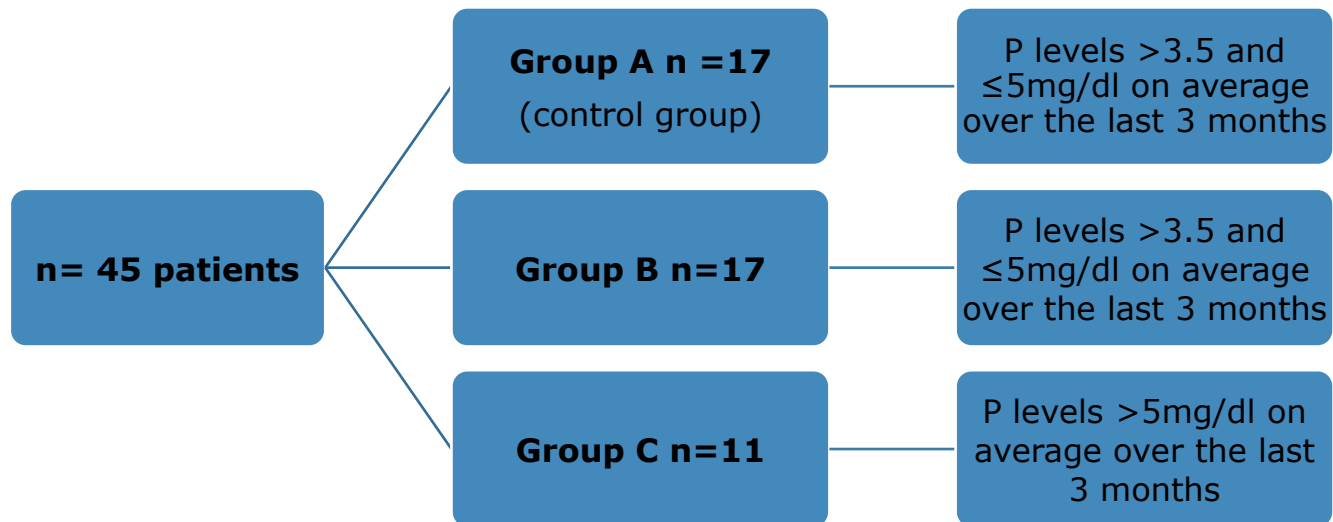
- **Hyperphosphataemia** in haemodialysis patients is often associated with **non-adherence to treatment**.
- Since this problem is often related to a **lack of knowledge** about **food intake and medication**, an **interdisciplinary approach** should be taken.
- The main objective of this study is to assess the **impact** of an **interdisciplinary education program on phosphorus levels and treatment adherence** in CKD patients.

# Methods (1/2)

- This is a prospective, quantitative, descriptive, and analytical study that started in February 2016.

## Inclusion criteria:

- Patients taking phosphate binders at baseline (OsvaRen<sup>®</sup>, Phosphosorb<sup>®</sup>, Renvela<sup>®</sup>);
- Patients on Haemodialysis programme for at least 4 months;
- Non-institutionalised patients;
- Patients with an average P level  $>3.5$  mg/dl over the last 3 months.



# Methods (2/2)

## 1<sup>st</sup> Stage

**February - April 2016** » Implementation of an interdisciplinary education programme in groups B and C

Assessment of treatment adherence of patients in groups A , B and C before and after implementation of the education programme

Analysis of the average of phosphorus levels before, during and after implementation of the education programme in group A, B and C

## 2<sup>nd</sup> Stage

**February - April 2017** » Implementation of an interdisciplinary education programme only in patients of group C and those responsible for the preparation of the patient's meals

Analysis of the average of phosphorus levels before, during and after implementation of this education programme in group A, B and C.

Analysis of the relationship between prescription of phosphate binders and phosphate binders effectively delivered to patients in group C

# Results (1/2)

## 1<sup>st</sup> Stage Results

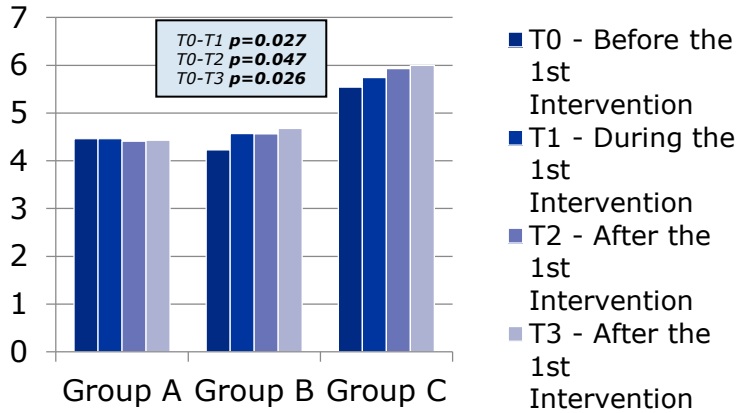


Figure 1: Phosphorus levels in the 1<sup>st</sup> study stage

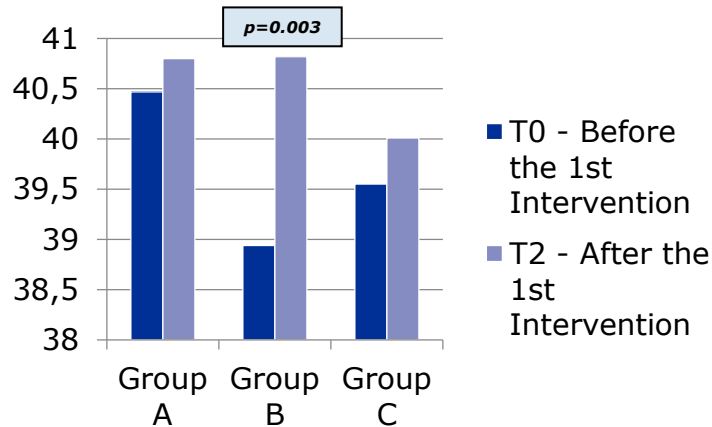


Figure 2: Treatment Adherence Scale

Frequency of ingestion Indicated in the Questionnaire of knowledge and attitudes about nutrition		Group B	
		T0 - Before the 1st Intervention	T2 - After the 1st Intervention
		%	%
<b>Cakes and pastries</b> $p=0.035$	Never	17	28
	Rarely	50	61
	At least once a week	28	6
<b>Yogurt</b> $p=0.029$	Never	22	33
	Rarely	17	28
	At least once a week	17	17
	1 time per day	22	11
<b>Egg</b> $p=0.035$	More than once a day	11	0
	Never	0	6
	Rarely	0	44
	At least once a week	61	39
<b>Packaged salty food</b> $p=0.025$	More than once a day	6	6
	Never	39	67
	Rarely	56	28
Frequency of ingestion Indicated in the Questionnaire of knowledge and attitudes about nutrition		Group C	
		T0 - Before the 1st Intervention	T2 - After the 1st Intervention
		%	%
<b>Canned food</b> $p=0.046$	Never	8	23
	Rarely	69	54
	At least once a week	23	0
<b>Cheese</b> $p=0.002$	Never	15	46
	Rarely	39	31
	At least once a week	46	8

Table 1: Questionnaire of knowledge of and attitudes towards nutrition

# Results (2/2)

## 2<sup>nd</sup> Stage Results

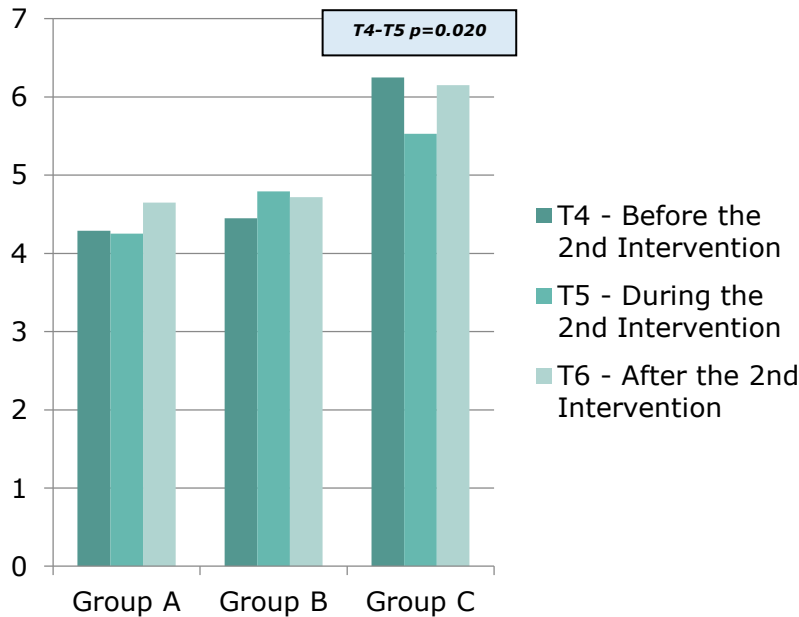


Figure 3: Phosphorus levels in the 2<sup>nd</sup> study stage

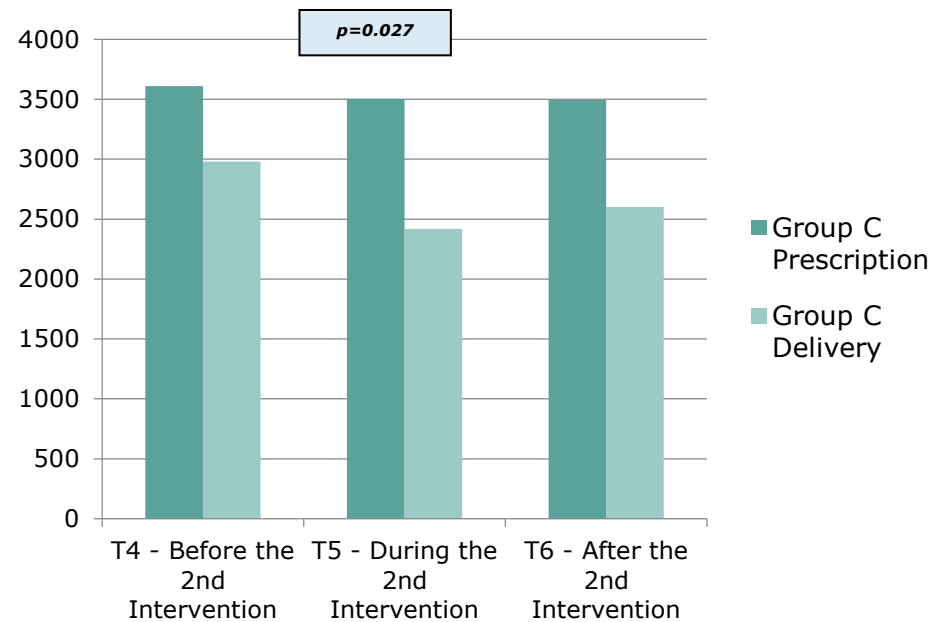


Figure 4: Relationship between prescription of phosphate binders and phosphate binders effectively delivered to patients in group C

# Conclusions

- We observed that an interdisciplinary approach can improve treatment adherence. However, this is not necessarily evident for phosphate levels, as we observed on the 1<sup>st</sup> stage.
- As for the 2<sup>nd</sup> stage, we observed a significant improvement of phosphate levels in the study group. This fact suggests that the involvement of caregivers in the education programme seems to be important for improvement in phosphorus levels.
- The results of the next quarters will show how effective this 2<sup>nd</sup> intervention can be both in the medium and long term.



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

# Acknowledgments

<b>Clemente Sousa</b>	<b>RN. PhD, Nursing Scool Porto Porto – Portugal</b>
<b>Luzia Fernandes</b>	<b>Pharmacist Fresenius Medical Care, NephroCare Portugal Lisboa – Portugal</b>
<b>Nuno Gomes</b>	<b>Head Nurse Fresenius Medical Care, NephroCare Coimbra, Coimbra – Portugal</b>
<b>Pedro Martins</b>	<b>Physical Exercise Programme Coordinator Fresenius Medical Care, NephroCare Maia, Maia – Portugal</b>
<b>Rui Camisa</b>	<b>RN Fresenius Medical Care, NephroCare Coimbra, Coimbra – Portugal</b>
<b>Sandra Ribeiro</b>	<b>Nutritionist Fresenius Medical Care, NephroCare Portugal Lisboa – Portugal</b>
<b>Cristina Antunes</b>	<b>Nutrition Manager Fresenius Medical Care, NephroCare Portugal Lisboa – Portugal</b>
<b>Alexandra Seabra</b>	<b>Training and Development Manager Fresenius Medical Care, NephroCare Portugal Portugal</b>
<b>João Fazendeiro Matos</b>	<b>Country Nursing Director Fresenius Medical Care, NephroCare Portugal, Porto - Portugal</b>