



## **45<sup>th</sup> EDTNA/ERCA International Conference**

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**Conference Theme: Quality versus Cost  
Sustainable Renal Care**

# **Home dialysis versus in-centre dialysis**

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# Presentation outline

**1** Introduction

**2** Objectives

**3** Methods

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# Introduction

The Home Haemodialysis programme (HHD) grants access to an educational program and individualized training for performing the dialysis treatment at home by the patient with the help of an assistant.

HHD promotes self-care, autonomy, patient comfort, allows an active professional life, flexibility in managing personal time, improves clinical outcomes and quality of life.

## RACHAEL WALKER (2014),

*“...identified 6 studies that provide evidence in support of benefit for home-based therapies. Higher initial costs are off-set by better patient outcomes and reduced facility costs for home therapies...”*

Nephrology 19 (2014) 459-470

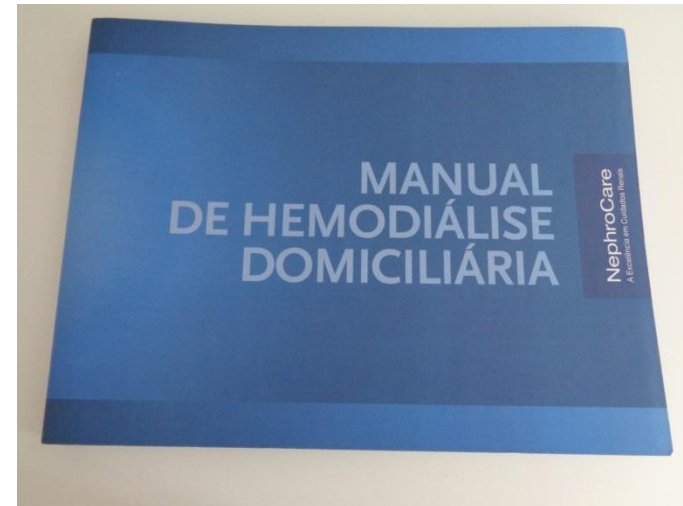
## Jean-Philippe Rioux (2015)

*“...Patient selection and training is arguably the most important step toward building a successful home hemodialysis (HD) program.”*

Hemodialysis International 2015; 19:S71-S79

## Training Program:

- Delivery of Home Haemodialysis Training Manual:
  - Vascular Access;
  - Dialysis fundamentals;
  - Intradialytic occurrences.
- 16 weeks of training with informative and practical training sessions in different modules final evaluation on each of the modules;
- Monthly recycling, with evaluation.



## The HomeHD offer:

- Complete services for home patients - Home delivery system and installation services, infrastructures adapting;
- Training for staff and patients;
- Nursing team and technical support, 24h/day;
- Periodic evaluation and supervision home visits nursing team;
- Monthly delivery of supplies at our patients houses;
- Dialysis in centre, once a month, for laboratorial evaluation.

## Equipment necessary for Home Haemodialysis (per patient):

- 1 haemodialysis machine;
- 1 haemodialysis armchair;
- 1 AquaC UNO H water treatment system;
- 1 scale;
- 1 worktable.



- Haemodialysis has a huge impact on the quality of life of a dialysis patient;

## 5008S CorDiax HHD is offering:

- Convenient and safe handling for patients;
- Machine user-friendly.





# Introduction (CONT...)

- Simplified screen for control of key treatment parameters at a glance;
- Emergency button on remote control with preset functionality;
- Nursing support 24h/day.



# Objectives

- Compare clinical outcomes: Kt/V, ferritin, albumin;
- Compare erythropoiesis stimulating agent (ESA) and iron dose;
- Compare medication antihypertensive consumptions in HHD with in-centre haemodiafiltration;

# Methods

- From January to December 2014 we compared clinical data of 9 patients performing HHD (group A) with data of 10 randomly selected in-centre patients on HDF (group B);
- Relevant clinical data were Kt/V, ferritin, albumin and ESA, iron, antihypertensive consumption;
- The Wilcoxon-Mann-Whitney test was applied.

# Results

- 19 patients, divided into 2 groups, **A** e **B**;
- Average age was  $62.88 \pm 4.90$  versus  $63.60 \pm 4.78$  years,  $p=0.466$ ;
- 1 diabetic versus 2 diabetics;
- 4 patients (44,5%) versus 6 patients (60%) consumed antihypertensive medication;

Age adjusted Charlson Comorbidity Index differences was similar between both groups.

# Results (Cont...)

The following average levels were obtained for group A versus group B:

	Group A	Group B	<i>p</i> value
Hb	11.42±1.08g/dL	11.15±1.06g/dL	0.057
Ferritin	487.30±230.16ng/mL	665.75±369.39ng/mL	<0.001
Albumin	4.05±0.29g/dL	4.10±0.49g/dL	0.916
ESA (µg/kg/month)	0.73±0.71	1.44±1.23	<0.001
Iron (mg/kg/month)	2.08±0.18	2.50±0.13	0.027
Kt/V	1.51±0.25	1.90±0.39	<0.001
Treatment time	240min	238min	

# Conclusions

- There was no difference in outcomes between both groups besides a lower ESA consumption in HHD and a higher Kt/V in in-centre dialysis;
- Differences in Kt/V values are probably justified by the different kind of treatment modalities carry on in-centre prescriptions (On Line HDF) vs. HHD (std. HD);
- With HHD we can offer efficient treatment which could probably help reduce costs for the NHS, eg. with patients transportation to the dialysis centre.

The HHD is a program that allows the patient to perform their dialysis treatment at home based on a promotion for health and giving priority to their autonomy and self-care.

In this program, the inclusion of the patient in the treatment plan is essential to get good results, their adherence and collaboration.

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



# Acknowledgments

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