GRAFT VERSUS NATIVE ARTERIOVENOUS FISTULA. EQUAL DIALYSIS PRESCRIPTION TO ACHIEVE THE EFFICIENCY OBJECTIVES UNDER ONLINE HEMODIAFILTRATION?

J.Varas[1], JI. Merello[1], R. Ramos[1], A. Fernández de Diego[1], M. Vélez1, S. Roca[2], M. Albadalejo[2] and M. Molina[2]
[1]Medical board Fresenius Medical Care Spain. [2]Servicio de Nefrología, Hospital Universitario Santa Lucía, Cartagena (Murcia), España.

NephroCare

INTRODUCTION

The biological differences for grafts and native fistulas (AVF) in terms of elasticity and diametrical plasticity are evident. These differences may affect directly to the blood pressure (BP) across the vascular access (VA). Nowadays the guidelines lack specific recommendations for differencing the management for both kinds of VAs.
Here we try to define if AVF and grafts are able to achieve the same dialytic efficiency under On-Line Hemodiafiltration (HDF) treatment, fixing the BP measured at the arterial side of the Monitor (ABP).

PATIENTS AND METHODS

A retrospective cross-sectional study since August to October 2015 was designed for this project. All prevalent (HDF for more than 3 months) adult (>18 years old) patients, treated with Helixone® dialyzers, using 5008 Fresenius Medical Care (FMC) Monitor connected to TMOM®, an automatically method for data transfer to EuCliD® database in any of the FMC Spanish clinics, were screened for their induction in this study.

Clinical practice in Spain's FMC clinics includes 720 minutes of effective treatment time, fixing Q_B by ABP values. Only patients with ABP between 220 and 250 mmHg were included.

The following demographic and clinical features were also recorded: Age, gender, HDF vintage, CKD etiology, mean ABP and Monitor's venous blood pressure (VBP), mean effective treatment time (T), Liters of blood dialyzed (L) and post HDF infusion volume (LHDF), mean effective Q_B, average ionic dialisance, Kt and Kt/V estimated by OCM®, recirculation measured by BTM®, for all the HDF sessions.

	AVF	Graft	P-value
	11244	293	
Arterial Blood Pressure (mm.Hg)	233.12 ± 8.31	233.28 ± 8.28	0.741
Venous Blood Pressure (mm.Hg)	200.59 ± 24.93	218.17 ± 26.07	0.000
Dialyzers Membrane Surface (m)	1.63 ± 0.11	1.63 ± 0.10	0.743
Effective time (min)	241.45 ± 8.44	241.68 ± 7.47	0.487
Recirculation (%)	15.55 ± 5.96	15.94 ± 6.08	0.301
Qb (mL/min)	445.11 ± 38.94	438.21 ± 39.68	0.024
Ionic dyalisance (mL/min)	249.74 ± 25.55	241.81 ± 25.25	0.000
Total blood dialyzed (L)	107.48 ± 10.19	105.9 ± 10.02	0.070
Kt	60.88 ± 6.4	58.77 ± 6.66	0.000
Kt/V	2.03 ± 0.44	1.95 ± 0.40	0.021
HDF infusion volume (L)	24.36 ± 4.65	23.35 ± 3.71	0.000
% Sessions not on target for Kt	4.10%	7.72%	0.003
% Sessions with <21 L post HDF vol.	10.71%	20.48%	0.000

RESULTS

842 patients treated in 14 Spanish FMC clinics were included. Analyzing a total of 1**1537** HDF sessions, no significant differences for ABP between groups were found. Also we did not found significant differences for the average dialyzers membrane surface, T and recirculation between grafts and AVFs.

By contrast, the grafts showed significant higher VBP values but significant lower Q_B, L and LHDF. Finally we compared the percentage of sessions does not reach Kt and/or LHDF.

This analysis revealed a significant higher percentage of sessions not able to reach the target for the objective Kt (established as Kt by Body surface area) or the 21 Liters of LHDF for grafts, compared to AVFs.

CONCLUSIONS

- **The data presented here suggests that it could be advisable setting new and different limits for the proper management of grafts and AVFs.**
- **These new blood pressure recommendations may have special attention for those patients receiving dialysis by grafts and not reaching their HDF dose and hence their efficiency in the treatment.**

FRESENIUS MEDICAL CARE

53 ERA
499--SP
Dialysis. Vascular access.
Manuel Molina
DOI: 10.3252/pso.eu.53era.2016
ePosters supported by F. Hoffmann- La Roche Ltd.
53rd CONGRESS ERA-EDTA VIENNA AUSTRIA MAY 21-24, 2016
Held jointly with Österreichische Gesellschaft für Nephrologie
PosterSessionOnline.com