

# QUALITY OF LIFE IN HEMODIAFILTRATION WITH ENDOGENOUS REINFUSION (HFR) VERSUS BICARBONATE HEMODIALYSIS (BHD): CROSS-SECTIONAL MULTICENTRE STUDY IN ITALY .

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## OBJECTIVES

In hemodialysis (HD) patients, poor health-related quality of life (HRQoL) is frequent and it is associated with adverse outcome [1].

It is well known that HRQoL and nutritional status are strictly linked [2]. Whether amelioration of chronic inflammation and improvement of nutritional status modifies HRQoL is ill-defined.

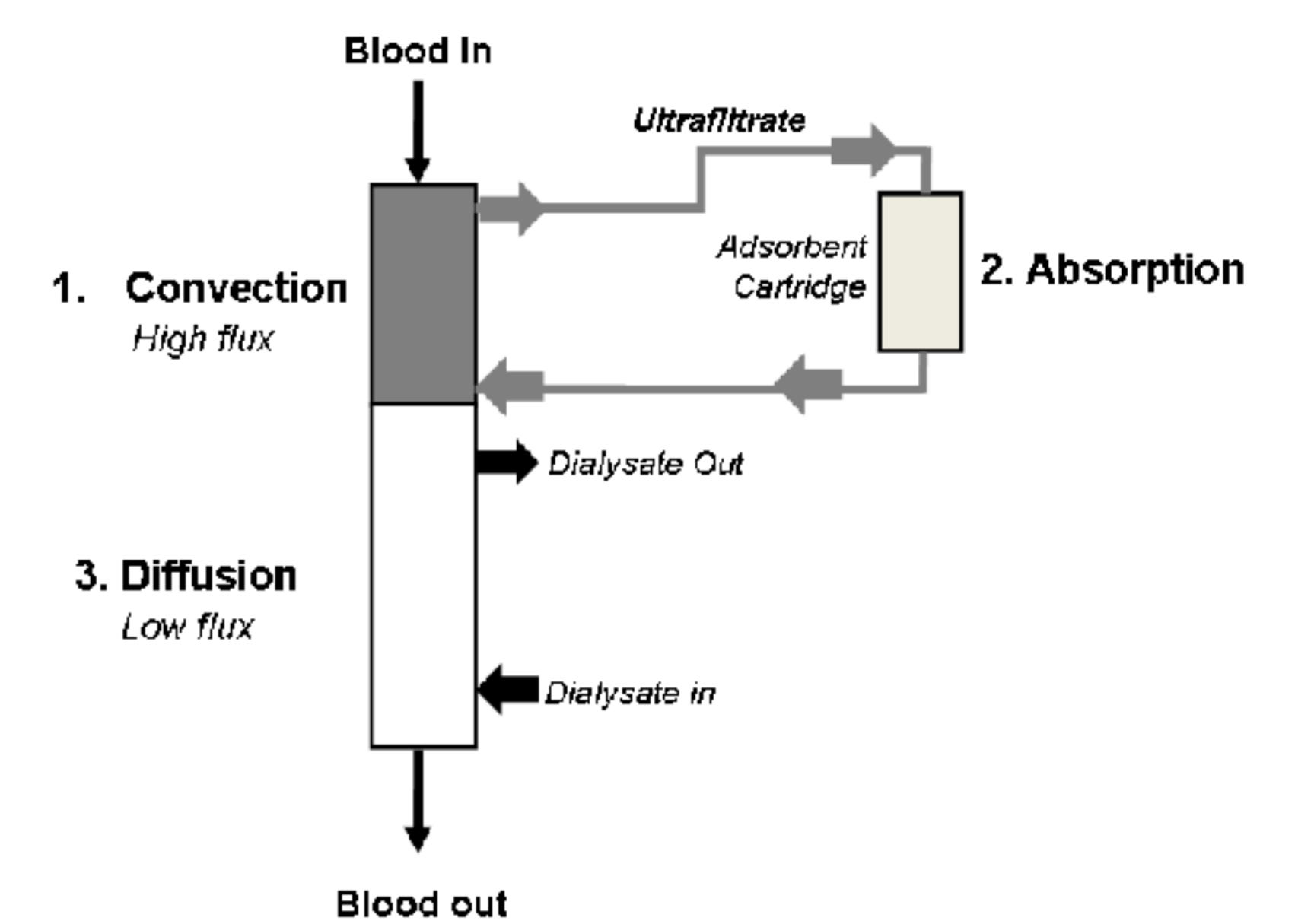
Hemodiafiltration with endogenous reinfusion (HFR) is an alternative dialysis technique (fig.1) that combining diffusion, convection and absorption, reduces inflammation burden and malnutrition [3-5] but it has never been evaluated the effect on HRQoL.

## METHODS

We designed a cross-sectional multicentre study in order to compare the HRQoL in patients treated with HFR versus BHD.

We enrolled adult patients treated for at least 6 months HFR, with life expectancy greater than six months and without remarkable cognitive deficit. The recruited patients in HFR were matched for age, gender, dialytic vintage and performance in activities of daily living (Barthel index) with BHD treated patients. Demographic, clinical, laboratory and treatment data were collected and SF-36 questionnaire for the assessment of QoL was administered. Twenty-four dialysis public centres in central and southern Italy was recruited.

Figure 1. Graphical representation of HFR.



## RESULTS

One hundred fourteen patients were enrolled (age 65.4 ± 13.5 years; dialysis vintage 5.4 (3.3-10.3) years; 53% males) from 18 dialysis non-profit centres in central and southern Italy. As result of matching, no difference in age, gender, dialytic age and Barthel index was found between HFR and BHD patients. KTV, hemoglobin and serum albumin were similar between the two treatment groups. In HFR patients we observed higher values of SF-36 physical component score than BHD patients, whereas no significant difference emerged in the mental component score. In particular, as described in the following table, HFR patients had a better Physical Functioning and Role Physical.

	HFR (n=57)	BHD (n=57)	P
Physical Component	56±20	48±23	0.048
Mental Component	57±21	55±19	0.698
Physical Functioning	61±26	51±30	0.045
Role Physical	66±47	45±46	0.027
Bodily Pain	63±25	58±31	0.346
General health	40±17	39±19	0.676
Vitality	51±22	48±21	0.492
Social Functioning	64±25	69±20	0.290
Role Emotional	64±40	60±43	0.595
Mental Health	64±24	60±22	0.437

## CONCLUSIONS

HFR is associated with a better physical component of HRQoL than BHD, independently of age, gender, dialysis vintage and invalidity score.

Whether these finding translates into a survival benefit must be assessed in longitudinal study.

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