



HEALTH-RELATED QUALITY OF LIFE IN HIGH CONVECTIVE VOLUME ONLINE HEMODIAFILTRATION

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INTRODUCTION AND AIMS:

The purpose of this study is to evaluate health-related quality of life (HRQOL) of patients undergoing high convective volume online hemodiafiltration, and contribute to current controversial discussions regarding online hemodiafiltration.

METHODS:

In this study, end stage renal disease patients treated in an ambulatory healthcare centre, in which for 10 years all hemodialysis patients are treated by online hemodiafiltration, were offered to participate in an optional assessment of their health-related quality of life (no selection bias within the centre, total 200 patients). Assessment was performed with the Kidney Disease Quality of Life - Short Form (KDQOL-SF) [1, 2]. Based on publications of the Dialysis Outcomes and Practice Patterns Study (DOPPS), socioeconomic and clinical data of each patient were used to estimate expected health-related quality of life scores [3-5]. These expected scores were subsequently compared to the actual scores as indicated by the patients (paired t-test).

RESULTS:

111 questionnaires returned (response rate 55%). The mean age of analyzed patients was 68 ± 13.8 years, 55.6% were male.

Mean convective volume was 25.2 l ± 5.1 l (median 26.0 l).

HRQOL Measure	score	predicted score	p-value
Physical component summary (PCS)	35.2	29.4	< 0.001
Physical functioning	40.7	26.5	< 0.001
Role (physical)	31.3	25.5	0.076
Pain	57.5	48.0	0.001
General health	38.8	30.4	< 0.001

Red bold italic indicates significance (p < 0.05)

HRQOL Measure	score	predicted score	p-value
Mental component summary (MCS)	44.4	42.5	0.081
Social functioning	62.5	55.7	0.004
Role (emotional)	46.5	39.7	0.078
Vitality	37.4	34.7	0.066
Mental health	61.0	54.7	0.001

Red bold italic indicates significance (p < 0.05)

HRQOL Measure	score	predicted score	p-value
Symptoms, problems	69.0	65.5	0.025
Effects	54.0	55.5	0.254
Burden	32.2	32.3	0.479
Work status	23.7	20.8	0.208
Cognitive functioning	77.4	70.0	< 0.001
Quality social	77.1	77.9	0.314
Sexual functioning	52.4	65.0	0.996
Sleep	57.4	54.7	0.091
Social support	71.3	72.3	0.336
Staff encouragement	81.4	83.4	0.118
Satisfaction	73.7	69.8	0.014

Red bold italic indicates significance (p < 0.05)

CONCLUSIONS:

In contrast to other studies, these data suggest that:

- **Online hemodiafiltration might be associated with high health-related quality of life of end-stage renal disease patients.**
- Though not a randomised controlled trial, this study might contribute to current discussions regarding online hemodiafiltration.
- The **high convective volume** in this patient group should be noted. It might **explain discrepancies** to results of other studies [6, 7].
- These data result from only one centre, to exclude **possible selection bias** further research is needed.

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