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High volume online haemodiafiltration prevents protein-energy wasting

A study in the current issue of NDT [1] shows: High volume online haemodiafiltration (OL-HDF) has a beneficial effect on body composition and nutritional status.

Post-dilution online haemodiafiltration (OL-HDF) is considered the most efficient renal replacement treatment modality and its use is steadily increasing. Compared with conventional HD, OL-HDF enables better removal of middle molecular weight uraemic toxins by combining convective and diffusive clearance.

Doctor Pablo Molina and his colleagues performed a prospective, controlled, quasi-randomized study to evaluate the effects of high-volume post-dilution OL-HDF on body composition and nutritional status in prevalent HD patients. 33 patients were randomized and assigned to OL-HDF treatment or remained on HF-HD. All patients received dialysis treatment thrice weekly. The primary outcome measures were the change from baseline to the end of the study in lean tissue mass (LTM), intracellular water (ICW) and body cell mass (BCM; the metabolically active component of LTM) measured quarterly throughout the 12-month intervention.

As a result, lean body mass remained stable in the OL-HDF group but decreased in the HF-HD group. These differences were statistically significant at Month 12. "All in all this study supports the hypothesis that high volume OL-HDF can positively impact on the protein hypercatabolic state of HD patients, it may contribute to preserve lean body mass, stabilize protein and fat stores, increase protein intake and reduce inflammation", as Doctor Molina points out. "This might be an important insight, because we all know that patients on HD are at an elevated risk for morbidity and mortality – and this seems to correlate to poor nutritional status. Of course, our study had a relatively small sample size, therefore larger trials are needed for verification."

[1] <https://academic.oup.com/ndt/advance-article-abstract/doi/10.1093/ndt/gfx342/4821906?redirectedFrom=fulltext>

About ERA-EDTA

With more than 7,500 members, the ERA-EDTA ("European Renal Association – European Dialysis and Transplant Association") is one of the biggest nephrology associations worldwide and one of the most important and prestigious European Medical Associations. It supports basic and clinical research in the fields of clinical nephrology, dialysis, renal transplantation and related subjects. It also supports a number of studies as well as research groups and has founded a special "Fellowship Programme" for young investigators as well as grant programmes. In order to involve young nephrologists in all its activities ERA-EDTA has created the "Young Nephrologists' Platform" (YNP), a very active committee whose board includes members who are 40 years old or younger. In addition, it has established various working groups to promote the collaboration of nephrologists with other medical disciplines (e.g. cardiology, immunology). Furthermore, a "European Renal Best Practice" (ERBP) advisory board was established by the ERA-EDTA to draw up and publish guidelines and position statements. Another important goal of the ERA-EDTA is education: The series of CME-courses combined with the annual congress offer an attractive scientific programme to cover the need for continuous medical education for doctors working in the fields of nephrology, dialysis and transplantation. The association's journals, NDT (Nephrology, Dialysis, Transplantation) and CKJ (Clinical Kidney Journal), are currently the leading nephrology journals in Europe; furthermore NDT-Educational is the online educational journal of the society, with free access for all users, as well as being a very important and useful feature of NDT-Educational "Literature Review". The ERA-EDTA Registry is a large epidemiologic database comparing countries by assessing nephrology practice throughout Europe. ENP, the European Nephrology Portal, is the latest new initiative of ERA-EDTA: here all those interested in the activities of the Society can find everything that is happening, all in one place! Finally, ERA-EDTA is a member of the European Kidney Health Alliance (EKHA), a consortium of patients, nurses and foundations all related to renal issues that actively interacts with the European Parliament. For more information please visit www.era-edta.org