

## Comments on "High convective volumes are associated with improvement in metabolic profile in diabetic patients on online haemodiafiltration"<sup>☆</sup>

### Comentarios sobre «Los altos volúmenes convectivos se asocian a la mejoría del perfil metabólico en los pacientes diabéticos en hemodiafiltración online»

#### ARTICLE INFO

##### Article history:

Dear Editor,

The study published by Macías et al.,<sup>1</sup> High convective volumes are associated with improvement in metabolic profile in diabetic patients on online haemodiafiltration, describes interesting observations related to HbA1c, a marker of chronic hyperglycaemia.<sup>2,3</sup> They show that, in patients treated with haemodiafiltration, the mean annual replacement volume was significantly correlated with the increase in the levels of HDL-c and prealbumin, as well as a reduction in CRP and triglycerides. Additionally, in individuals treated with haemodiafiltration with mean annual replacement volumes of  $29.3 \pm 1.7$  L/session HbA1c values decreased significantly compared to those who received mean annual replacement volumes of  $23.9 \pm 1.9$  L/session (HbA1c  $-0.51 \pm 1.24\%$  vs.  $0.01 \pm 0.88\%$ ).<sup>1</sup> These observations are suggestive, however it is important to consider the analytical performance of the test used to measure HbA1c. In both clinical practice and research, quantifying HbA1c with standardised methods with good performance strengthens the reliability of the results.<sup>2-5</sup>

The benefits of haemodiafiltration in individuals with advanced chronic kidney disease, who require dialysis, were attributed to its ability to remove small- (<500 Da) and medium- (0.5-40 kDa) molecular-weight substances.<sup>6,7</sup> The improvement in dyslipidaemia, chronic inflammatory process, oxidative stress, endothelial damage, and interferences in the coagulation cascade were related to convective removal of medium-sized molecules.<sup>6,7</sup> Assuming that the precision and accuracy of the test for measuring the HbA1c used by Macías et al. allow to distinguish the variations reported and that these observations are reproducible, what mechanisms would be involved in improved control of chronic hypergly-

caemia during treatment with haemodiafiltration and high replacement volumes?

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#### Conflict of interest

There are no conflicts of interest with this work.

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