UC Irvine

UC Irvine Previously Published Works

Title

Reply

Permalink

https://escholarship.org/uc/item/8dn2x915

Journal

Nephrology Dialysis Transplantation, 22(7)

ISSN

0931-0509

Authors

Suliman, Mohamed E Stenvinkel, Peter Qureshi, Abdul Rashid et al.

Publication Date

2007

DOI

10.1093/ndt/gfm235

Copyright Information

This work is made available under the terms of a Creative Commons Attribution License, available at https://creativecommons.org/licenses/by/4.0/

Peer reviewed

Nephrology Dialysis Transplantation

Letters and Replies

inflammation and wasting. In our paper, this was clearly acknowledged, and several study limitations were discussed. We should note that the small size of our study population limits the statistical power leading to widening confidence intervals. Not withstanding this and other limitations of our study, the reversal of the direction of the associations after multivariate adjustment for surrogates of inflammation and wasting indicates a trend with possible biological plausibility. Indeed, patients with higher total serum homocysteine (tHcy) levels tended to have lower mortality before adjustment for inflammation-wasting, whereas after adjustment they had a 27% higher all-cause and 22% higher cardiovascular mortality. Consistent with our foregoing findings, a recent study by Ducloux et al. [2] found that tHcy in haemodialysis (HD) patients with inflammation-wasting syndrome was inversely related to all-cause mortality, but this association was in the opposite direction in HD patients without the inflammationwasting. Although these studies may not provide sufficient explanation for the reverse epidemiology phenomenon, they show that the inflammation-wasting confounds the background association between tHcy and mortality in CKD and that this effect may be so overwhelming that it may even reverse the direction of the associations. Prospective studies including larger numbers of patients are required to better examine the true aetiology of the enigmatic phenomenon of reverse epidemiology of tHcy in CKD.

Conflict of interest statement. None declared.

¹Renal Medicine and
Baxter Novum

Karolinska Hospital Huddinge
Karolinska Institute
Karolinska Hospital Huddinge
Karolinska Hospital Huddinge
K56 Stockholm 141 86
Sweden

Mohamed E. Suliman

Peter Stenvinkel
Abdul Rashid Qureshi
Kamyar Kalantar-Zadeh
Bengt Lindholm

Sweden

Email: mohamed.suliman@klinvet.ki.se

- 1. Suliman M, Stenvinkel P, Qureshi AR *et al.* The reverse epidemiology of plasma total homocysteine as a mortality risk factor is related to the impact of wasting and inflammation. *Nephrol Dial Transplant* 2007; 22: 209–217
- Ducloux D, Klein A, Kazory A et al. Impact of malnutritioninflammation on the association between homocysteine and mortality. Kidney Int 2006; 69: 331–335

doi:10.1093/ndt/gfm235

Reply

Sir,

We thank Dr Movilli for his comments and for the interest shown in our study [1]. We agree that there was no statistically significant difference in hazard ratio after adjustment for