

## DIALYSIS

### Wasting modifies the association between PTH and mortality in dialysis patients

The presence of wasting modifies the association of parathyroid hormone (PTH) with mortality in patients on dialysis, according to a new study. Christiane Drechsler and colleagues say that their study demonstrates that the association of PTH with adverse outcomes is dependent on the disease state of the population studied, and helps to explain some of the conflicting results in the literature.

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The association of PTH with mortality in patients with chronic kidney disease (CKD) has long been a subject of controversy. The known effects of wasting on several metabolic pathways and earlier studies that suggested a

potential influence of wasting on PTH metabolism led Drechsler and colleagues to investigate whether wasting might modify the association of PTH with mortality in patients with CKD.

“I wondered whether wasting was masking the clinical effects of PTH, and could in part be responsible for the discrepant results”, she explains.

The researchers used data from the German Diabetes and Dialysis Study to stratify 1,255 patients who had type 2 diabetes and who were on hemodialysis, according to the presence of wasting, defined as albumin levels  $\leq 38$  g/l or BMI  $\leq 23$  kg/m<sup>2</sup>. Drechsler and colleagues then analyzed the association between PTH level and mortality in patients with and without wasting. Patients without wasting had a significantly increased risk of mortality during the 4 years of follow-up. Patients in the highest tertile of PTH levels had a 74% higher risk

of death than those in the lowest tertile. However, no association between PTH level and mortality was found in patients with wasting. As Drechsler explains, “...the negative effects of high levels of PTH were observed only in relatively healthy patients without wasting syndrome. This association was nullified in patients with wasting”

The researchers acknowledge that wasting is a complex condition. However, if confirmed, they say their findings demonstrate that wasting should be taken into account when risk of mortality according to PTH level is assessed in patients with CKD.

Susan J. Allison

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