Title

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COMPARING MORTALITY RISK OF MINERALS, PTH AND ALKALINE PHOSPHATASE OVER 6 YEARS IN 12,422 CHRONIC PERITONEAL DIALYSIS (CPD) PATIENTS

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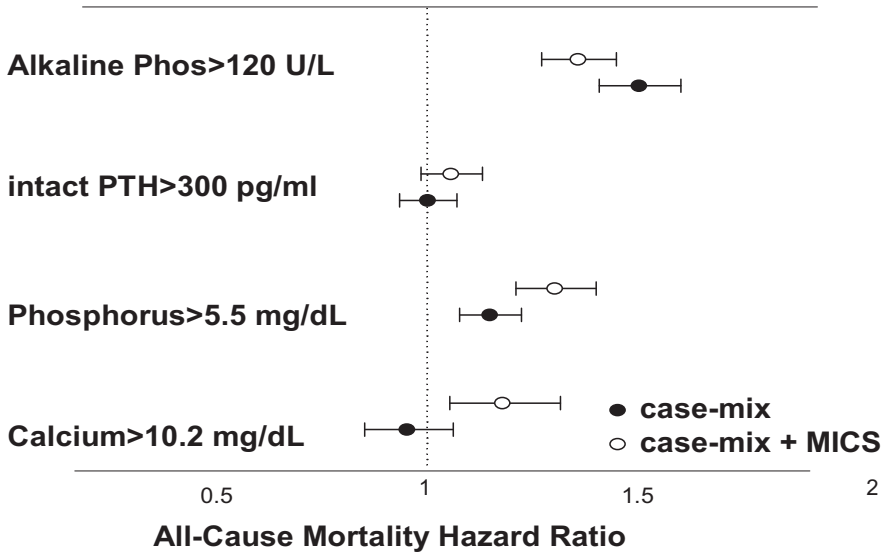
Osteodystrophy is a common complication of CKD and associated with disorders of mineral metabolism, changes in levels of PTH and alkaline phosphatase. We identified 12,422 CPD patients whose serum alkaline phosphatase (AP) was measured at baseline. They were 54±16 years old and included 47% women, 23% African Americans and 13% Hispanics. Each measure was dichotomized according to clinically meaningful cut-off levels: Serum calcium ≥ 10.2 mg/dl; phosphorus ≥ 5.5 mg/dl; PTH ≥300 pg/ml; and AP ≥120 U/L (vs. lower range as the reference). We found that higher levels of these measures were associated with higher death risk after adjusting for case-mix and malnutrition-inflammation-cachexia syndrome (MICS) (see Figure).



In this large national cohort of CPD patients, higher levels of serum calcium (≥10.2 mg/dl), phosphorus (≥5.5 mg/dl), PTH (≥300 pg/m), and AP (≥120U/L) appeared associated with higher all-cause mortality.