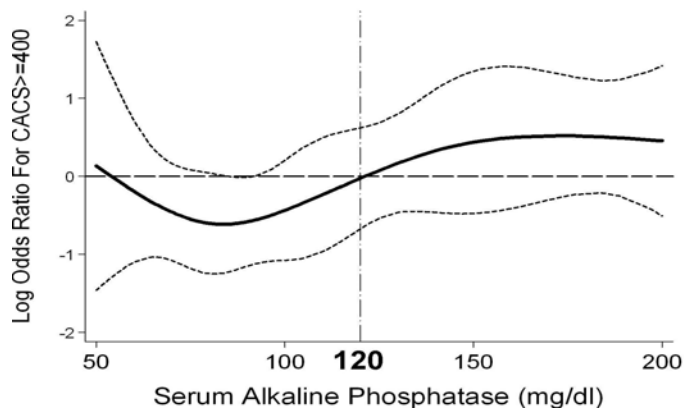


ASSOCIATION OF SERUM ALKALINE PHOSPHATASE AND CORONARY ARTERY CALCIFICATION IN HEMODIALYSIS PATIENTS

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Background: Coronary artery calcification is associated with cardiovascular morbidity & mortality in hemodialysis (HD) patients (pts). We hypothesized that serum alkaline phosphatase (AlkPhos) is a predictor of CAC score (CACS) in HD pts. **Methods:** We studied the association between AlkPhos and CACS in HD pts. **Results:** CACS>0 was present in 136 (out of 151) pts who underwent EBCT (56±13 yrs old, 38% women, 46% Blacks, 61% diabetics); median AlkPhos was 101 mg/dl; 51% (n=69) had CACS ≥400, 34% (n=46) AlkPhos ≥120 mg/dl. The odds of having CACS ≥400 was increased by increasing AlkPhos (Figure). In unadjusted logistic model, HD pts with AlkPhos



≥120 mg/dl compared to those with AlkPhos <120 mg/dl, had an odds ratio (OR and 95% CI) of 2.5 (1.2-5.2) for having CACS ≥400. In the model that was adjusted for age, sex, diabetes, vintage and interleukin-6, AlkPhos ≥120 mg/dl was robustly associated with CACS ≥400 (OR=3.6, 95% CI 1.3-9.6). **Conclusion:** Serum AlkPhos, mainly levels greater than 120 mg/dl, may be a predictor of coronary calcification in MHD pts, independent of case-mix and inflammation.