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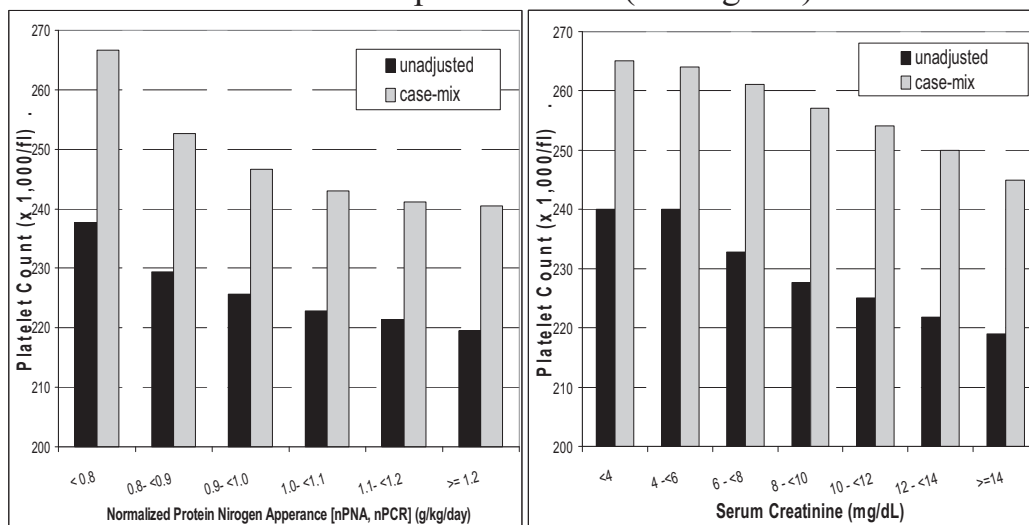
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286

ASSOCIATION OF PLATELET COUNTS WITH SURROGATES OF DIETARY PROTEIN INTAKE AND MUSCLE MASS IN HEMODIALYSIS PATIENTS

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Better nutritional status, as indicated by higher dietary protein intake and/or higher muscle mass, is associated with greater survival in maintenance hemodialysis (MHD) patients. We examined the hypothesis that higher normalized protein nitrogen appearance (nPNA, nPCR) and serum creatinine, measures of protein intake and/or muscle mass, respectively, are associated with favorable platelet activity profile in MHD patients. We separately examined associations of 13-week averaged platelet count with 13-week averaged nPNA (g/kg/day) and serum creatinine (mg/dL) over 6 months in 40,697 MHD patients from DaVita clinics in the USA. Models were also adjusted for case-mix. Patients were 61±15 years old and included 47% women, 46% diabetics and 34% African Americans. The 13-week averaged platelet count was 229±78×10³. In both unadjusted and case-mix adjusted models, incrementally higher serum creatinine and higher nPNA levels were associated with lower platelet count (see Figures).



Based on these findings we advance the hypothesis that the relationship between malnutrition, inflammation, cardiovascular events and mortality may be mediated in part by thrombocytosis.