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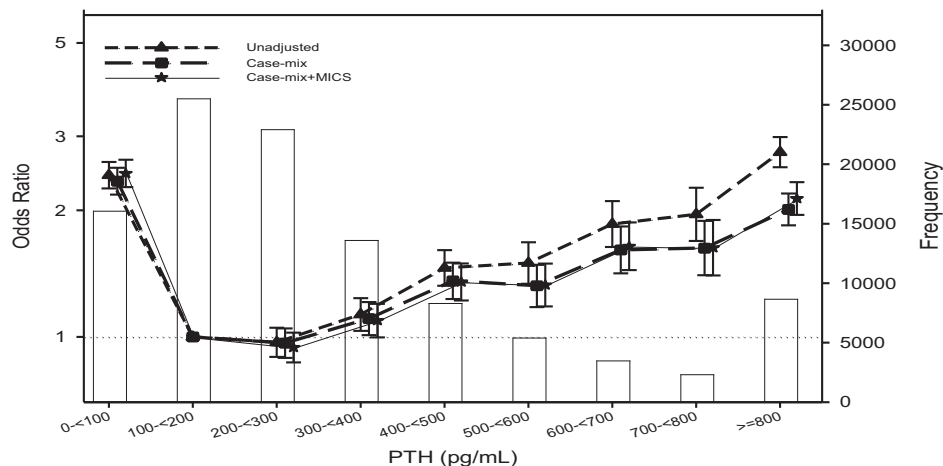
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THE LIKELIHOOD OF HYPERCALCEMIA ACROSS SERUM PTH LEVELS IN HEMODIALYSIS PATIENTS

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The correlates of serum PTH level in maintenance hemodialysis (MHD) are not well known. We hypothesized both lower and higher serum PTH level is associated with higher risk of hypercalcemia. Over an eight year period (7/2001-6/2009), we identified 106,760 MHD patients with PTH and calcium data in DaVita dialysis clinics. Logistic regression models were examined to assess the association between likelihood of hypercalcemia ($\text{Ca} \geq 10.2$ mg/dL) and serum PTH increments. Patients were 61 ± 16 years old and included 45% women, 59% diabetics and 32% Blacks. Compared to the group with PTH 100-



<200 pg/ml (ref), patients with PTH <100, 500-<600, 600-<700, 700-<800 and ≥ 800 pg/ml had more than two times, 33%, 64%, 63% and more than two times higher risk of hypercalcemia, respectively. Hence, the association of PTH level with high level of serum calcium is U-shaped, in that both very low levels and high levels of PTH are associated with hypercalcemia.