

**Self-Reported Knowledge About Chronic Kidney Disease and Relationship to PTH and Phosphate Levels in Inner-City Dialysis Patients-**

Introduction: Adherence to recommendations regarding control of hyperparathyroidism may relate to patient education. We examined the relationship between self-reported knowledge and PTH as well as phosphate values in inner-city dialysis pts.

Methods: A random sample of 31 dialysis pts were given a survey regarding their knowledge about CKD as well as the Beliefs in Medicine Questionnaire. Laboratory information was obtained from EHR.

Results: Mean age was  $57.2 \pm 18.8$  yrs. Mean time since starting dialysis was  $89.2 \pm 18.6$  mos. There were 18 (58.1%) men, 28 (90.3%) identified as black, 17 (55%) had not attended college. (64.5%) pts stated they did not know what marker is used to measure kidney function, 8 (25.8%) pts had never heard of creatinine, 19 (61.3%) pts agreed that they did not understand how kidney function is measured. 14 pts who answered negatively to 2-3 of those questions are classified as poorly knowledgeable (LOKNOW). PTH was higher in the 12 pts who answered that they did know the answers (HIKNOW) vs. LOKNOW ( $1172.7 \pm 244.9$  vs.  $492.6 \pm 68.5$ ,  $p=0.007$ ). Phosphate levels were also higher ( $5.1 \pm 0.24$  vs.  $3.71 \pm 0.36$ ,  $p=0.005$ ). HIKNOW was younger than the LOKNOW group ( $50.6 \pm 4.3$  vs.  $63.8 \pm 4.4$  yrs.,  $p=0.049$ ). There is an inverse correlation between age and phosphate levels ( $r = -0.514$ ,  $p = 0.005$ ). There is no difference in sex, months on dialysis or level of education between the two groups. HIKNOW pts were more likely to rate their health as excellent ( $r=-0.48$ ,  $p=0.009$ ).

Conclusion: In our population of inner-City dialysis pts: 1. Pts who self-report more knowledge regarding kidney disease had higher PTH and phosphate levels 2. Knowledgeable pts were younger and more likely to rate their health as excellent. 3. Older pts had lower phosphate levels 4. Understanding the relationship between pt beliefs and adherence to PTH lowering therapies may give insight into approaches for achieving control, as the pts who believed they were knowledgeable had very high levels.