patients and their relatives need to understand how to best control for phosphorous and this can only be done through continuous nutrition education. The Authors are waiting on the results of phosphorus levels for the next 3 months. The Authors would like to thank Baxter Healthcare for its organizational support.

http://dx.doi.org/10.1016/j.krcp.2012.04.518

195

DOES WEIGHT LOSS ADD VALUE TO BLOOD PRESSURE CONTROL AMONG PATIENTS WITH DIABETIC KIDNEY DISEASE?

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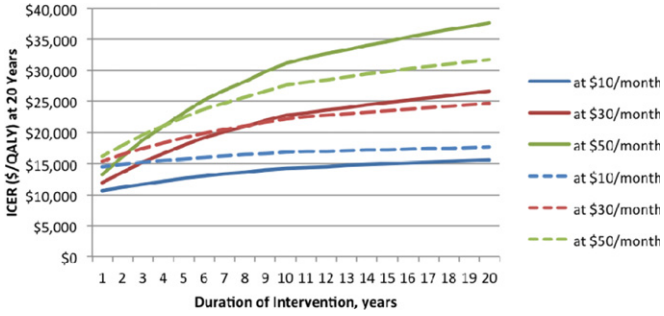
Obesity is an independent risk factor for development and progression of diabetic kidney disease (DKD). Whether weight loss provides any additional benefit beyond blood pressure (BP) control is unclear. To simulate a trial, we used the Archimedes model, a person-specific simulation model including detailed representations of physiology, diseases, and health care systems. Our population-based sample represented individuals diagnosed with type 2 diabetes and DKD drawn from 1999-2006 cohorts of NHANES. Simulations were generated to estimate costs and health outcomes across time for 3 treatment strategies: (1) standard of care (STD); (2) blood pressure control (BP); and (3) BP combined with 5% weight loss (BPWT). BP control represents 3.5%&6% reductions for those with SBP > 130 and SBP > 140, respectively. Over a 20y time horizon, discounted costs for the STD group were $165,261 with discounted quality adjusted life-years (QALYs) of 5.89. With BP estimated at $30/month, the incremental cost-effectiveness ratio (ICER) was $26,626/QALY compared to STD. With BPWT at $50/month, the ICER was $31,773 compared to STD. Even with varying intervention costs and durations (Figure), the ICERs remained favorable, especially for the BPWT group.In conclusion, weight loss in addition to BP control appears to provide favorable value, particularly over moderate time horizons.



http://dx.doi.org/10.1016/j.krcp.2012.04.519

196

VITAMIN D SUFFICIENCY IN HEMODIALYSIS PATIENTS AND ITS ASSOCIATION WITH NUTRITIONAL AND CLINICAL PARAMETERS

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Renal failure is a complicating factor in the maintenance of vitamin D adequate levels, which can interfere in the patients' nutritional status. The aim of this study was to evaluate the association of serum 25-hydroxyvitamin D [25(OH)D] with clinical and nutritional parameters. Prevalent hemodialysis (HD) patients were submitted to a single evaluation about demographic characteristics, clinical data and laboratory measurements. Anthropometric measurements and electrical bioimpedance were performed to obtain BMI, percentage of standard MAMC (%MAMC), fat percentage (%Fat) and phase angle (PA). Deficiency was defined as a 25(OH)D level < 15 ng/mL, insufficiency as 15-30 ng/mL and sufficiency as > 30 ng/mL. Univariate models were constructed and the variables associated with 25(OH)D sufficiency were included subsequently in the multiple regression model. Statistical significance was $p < 0.05$.One hundred twelve patients (59 male, 53 female) were included. Twenty seven (24.1%) were 25(OH)D deficient, 43 (38.4%) insufficient and 42 (37.5%) sufficient. In univariate regression, creatinin, albumin and PA were positively associated with serum 25(OH)D, while age, glucose, BMI and %MAMC were negatively associated. In multivariate regression, age and %MAMC were negatively associated with sufficiency. Most studied sample showed inadequate 25(OH)D levels. In our study, the result to be highlighted was the negative associations of 25(OH)D sufficiency with age and %MAMC, but all the findings suggest that fat interferes with vitamin D stores in HD patients.

http://dx.doi.org/10.1016/j.krcp.2012.04.520

197

RELATIONSHIPS AMONG EGFR, VITAMIN D METABOLITES AND PTH 1-84 IN CKD.

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Vitamin D undergoes 25-hydroxylation in the liver (25D) and 1-alpha hydroxylation in the kidney (1,25D). Both [25D] and [1,25D] fell with GFR in surveys of patients with CKD. Because 1,25D suppresses transcription of the PTH gene, low [1,25D] is thought to be a cause of high [PTH] in CKD. To examine relationships among eGFR, [PTH] 1–84 (Scantibodies), [25D], and [1,25D], we studied 8 normal subjects with eGFR 73–103 and 29 patients with eGFR 14–49 ml/min/1.73 m^2. Most patients had been taking supplemental vitamin D. Means (SEM) were compared by two-tailed t-test, and regressions were examined as indicated below. Results are summarized in the tables.

Variable	CKD (n=29)	Nl (n=8)	p
eGFR (ml/min/1.73 m^2)	30.0 (1.7)	88.6 (4.0)	< 0.001
[PTH] pg/ml	80.6 (8.6)	30.1 (3.7)	0.005
[25D] ng/ml	35.2 (2.5)	39.7 (3.4)	0.4
[1,25D] pg/ml	42.5 (3.6)	55.1 (4.8)	0.1

	CKD (n=29)		Nl (n=8)	
Regression	R^2	p	R^2	p
[PTH] on eGFR	0.36	< 0.001	0.13	0.4
[25D] on eGFR	0.001	0.9	0.01	0.8
[1,25D] on eGFR	0.20	0.014	0.12	0.4
[1,25D] on [25D]	0.37	< 0.001	0.18	0.3
[PTH] on [25D]	0.02	0.5	0.03	0.7
[PTH] on [1,25D]	0.03	0.4	0.003	0.9

In comparison to normal subjects, patients with CKD had lower eGFR, higher [PTH], and similar [25D] and [1,25D]. In the patients with CKD, [1,25D] varied directly and [PTH] inversely with eGFR. Unlike [1,25D], [25D] was not associated with eGFR, but [1,25D] nevertheless correlated strongly with [25D]. [PTH] was not related to [25D] or [1,25D]. In our patients with CKD, many of whom were vitamin D-replete, [25OHD] was the principal determinant of [1,25D]. Increased [PTH] could not be attributed to decreased [1,25D].

http://dx.doi.org/10.1016/j.krcp.2012.04.521

198

PROFILE OF SERUM AMINO ACIDS IN PATIENTS ON PERITONEAL DIALYSIS

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Patients on peritoneal dialysis (PD) are predisposed to disturbances in amino acid metabolism and development of malnutrition which are unfavorable prognostic factors. Studying the serum level of essential amino acids in patients on PD. The total of 56 PD patients (mean age 42.4 ± 11.5 years, treatment duration 24.0 ± 14.2 months) was examined simultaneously with 12 practically healthy volunteers (mean age 39.4 ± 10.7 years). Analysis of the dietary interviews and 3-day dietary journals was carried out. The levels of essential and conditionally essential