Success Rate of Dietary Control in CKD Stage II–IV Patients

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Background: There are many interventions to slow progression of CKD such as underlying control, medication as ACEI or dietary control. The dietary control is non-expensive, but less concern in practices. KDIGO recommends lowering salt intake (Na ≤2.3 gm/d) unless contraindicated and protein dietary control (protein ≤0.8gm/kg/d) in CKD stage IV to slow progression of CKD.

Objective: To determine the prevalence of physician adherence to dietary monitoring and success rate of dietary control in CKD stage II –IV patients

Methods: Medical records were reviewed in CKD II –IV patients in Songklanagarind Hospital during 2011-2015. The 24-hour urine samples were tested for Cr, sodium, urea, and phosphate to determine the dietary intake. Dietary control for Na, Protein and phosphate was judged according to KDIGO 2012.

Results: There were 227 in 4668 CKD stage II – IV patients (4.8%) with the collected 24-hour urine for diet monitoring. The 24-hour urine collection was adequate in 116 patients (58.58%). The succession rate of sodium, protein, and phosphorus control were 19.8%, 39% and 63%, respectively. The dietary control was completed in 7%. Patients with sodium controlled significantly had lower SBP and DBP (SBP 124.3 ± 16 vs 135.8 ± 18.3mmHg, P=0.005 and DBP 72.5 ± 10.4 vs 78.6 ± 12.3, P= 0.027, respectively.)

Conclusion: There is a low physician adherence rate for the monitoring of dietary control and also the low success rate of sodium and protein control in CKD stage II – IV patients. It is suggested to have a CKD clinic and practical guideline with simple checklists for physicians to improve adherence and succession for dietary control.

Keywords: Dietary monitoring and control, CKD, Sodium, Protein, Phosphorus