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ABSTRACTS

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DIETARY EDUCATION IN TYPE 1 DIABETES EDUCATION (DAFNE) AND ALBUMINURIA CHANGE: KUWAIT'S EXPERIENCEEbaa Al Ozairi, Juama Alkandari, Etab Tagadhom, Reem Asad
Dasman Diabetes Institute, Dasman, Kuwait

The Dose Adjustment for Normal Eating (DAFNE) course is a structured education program that aims to teach type 1 diabetes to change their self care behaviors by estimating the carbohydrate content of food and adjusting their insulin doses accordingly in order to maintain metabolic control. Microalbuminuria is well known to increase morbidity and mortality. DAFNE has been found to improve the glycosylated haemoglobin but no dietitian education program has been shown to be effective on albuminuria. Our aim of this study was to investigate the effect of a DAFNE course on regression of albuminuria. Seventy two type 1 patients have completed DAFNE course in Kuwait led by dietitians. Twenty eight participants were positive for albuminuria prior to DAFNE Course. Carbohydrate counting skills resulted in improvement of HbA1c. Twenty participants had regression in their albuminuria without blood pressure intervention.

In conclusion, this study shows significant improvement in albuminuria with sustained improvement in HbA1c through better carbohydrate skills. DAFNE course should prove cost effective with sustained glycemic profile and improvement of albuminuria and should become more widely available.

<http://dx.doi.org/10.1016/j.krccp.2012.04.325>**2**
EFFECT OF LOW-DOSE NIACIN ON DYSLIPIDEMIA, SERUM PHOSPHORUS LEVELS AND ADVERSE EFFECTS IN PATIENTS WITH CHRONIC KIDNEY DISEASEWon Suk An, Hyo Jin Kang, Ki Hyun Kim
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Niacin supplementation improves dyslipidemia and lowers serum phosphorus levels in chronic kidney disease (CKD) patients. However, its adverse effects, including hot flushing, hinder the administration of niacin. We evaluated whether low-dose niacin supplementation can improve dyslipidemia, lower serum phosphorus levels, and be administered with a low frequency of adverse effects in patients with CKD. We retrospectively analyzed the clinical records of CKD patients who had taken niacin from January, 2009 to June, 2011. We excluded patients with CKD1 and CKD 5. We then enrolled 31 CKD patients who had taken niacin at a fixed-dose of 500mg/day for 6 months. We also randomly selected 30 CKD patients who had been taking statin for 9 months as a control group. Among 34 CKD patients prescribed niacin, 5 patients (14%) complained of adverse effects, and 3 CKD patients (8%) discontinued niacin. There were no significant differences in baseline data between the niacin group and the control group. The proportion of patients in the niacin group who had been taking a statin, or omega-3 fatty acids was 67.7% and 48.8%, respectively. In the niacin group, high density lipoprotein cholesterol (HDL) levels were significantly increased ($p < 0.05$), and triglyceride ($p < 0.05$) at 12 weeks and 24 weeks compared to baseline levels. In the niacin group, phosphorus levels ($p < 0.05$) were significantly decreased, and glomerular filtration rate (GFR) was significantly increased ($p = 0.016$) at 24 weeks compared to baseline values; however, serum creatinine levels did not significantly change. Low dose niacin (500 mg/day) had a low frequency of adverse effects and also improved dyslipidemia, lowered serum

phosphorus levels, and increased GFR in CKD patients. Further studies are needed to evaluate the long term effects of low-dose niacin for renal progression of CKD.

<http://dx.doi.org/10.1016/j.krccp.2012.04.326>**3**
VASCULAR CALCIFICATION ON PLAIN RADIOGRAPHS IS ASSOCIATED WITH CAROTID INTIMA MEDIA THICKNESS, MALNUTRITION AND CARDIOVASCULAR EVENTS IN DIALYSIS PATIENTSWon Suk An², Ki Hyun Kim², Seong Eun Kim², Young Ki Son², Joong Kyung Kim¹¹ Department of internal medicine, Dong-A university, Bong Seng Hospital, Busan, Republic of Korea

Vascular calcification (VC) and carotid intima media thickness (CIMT) are highly correlated with cardiovascular (CV) disease. We hypothesized that significant VC on plain radiographs is associated with CIMT and CV events in dialysis patients. In addition, we evaluated risk factors for VC progression on plain radiographs in dialysis patients. In this two-year observational, prospective study, 67 dialysis patients were included. We checked plain radiographs at baseline and after 2 years. Laboratory tests and malnutrition score were obtained at baseline, after 1 year, and after 2 years. The mean age of dialysis patients was 56.3 ± 10.3 years and the duration of dialysis was 41.3 ± 34.5 months. The prevalence of significant VC was 61.2% and the prevalence of carotid artery atheromatous plaque was 36.6% in enrolled dialysis patients. The prevalence of carotid artery atheromatous plaque ($p = 0.025$), CIMT (right: $p = 0.045$, left: $p = 0.014$), malnutrition scores and CRP were significantly higher in patients with significant VC compared to patients without significant VC. Serum albumin and total iron binding capacity were significantly lower in patients with significant VC compared to patients without significant VC. During an mean observational period of 22 months there were 6 CV deaths and 17 patients suffered from CV events. Patients without significant VC showed lower CV events by the Kaplan-Meier method ($p = 0.015$). VC progression on plain radiographs was found in 35.7% among 56 patients followed up. Hemoglobin (Hb) was significantly increased according to elapsed time in patients who did not show VC progression on plain radiographs (10.3 g/dL at baseline, 10.8 g/dL after 1 year, 11.4 g/dL after 2 years). Hb ($\beta = -0.458$, $p = 0.006$) after 2 years was an independent factor for VC progression on plain radiographs. In conclusion, significant VC on plain radiographs was associated with CIMT, malnutrition, inflammation and CV events in dialysis patients. Conditions maintaining adequate Hb may retard VC progression on plain radiographs in dialysis patients.

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DIFFERENT ACUTE METABOLISM OF FRUCTOSE IN DIALYSIS PATIENTS COMPARED TO HEALTHY SUBJECTSBjorn Anderstam, Ann-Christin Bragfors-Helin, Jonas Axelsson, Abdul Rashid Qureshi, Rolf Wibom, Bengt Lindholm, Peter Stenvinkel
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The consumption of fructose has increased dramatically during the last two decades and parallels the epidemics of obesity, metabolic syndrome, diabetes and chronic kidney disease ADDIN EN.CITE ADDIN EN.CITE.DATA .