105 EFFECTS OF SOY PROTEIN AND NUTRITION EDUCATION ON PATIENTS WITH CHRONIC KIDNEY DISEASE

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This study aimed to evaluate the effects of soy protein and nutrition education on patients with chronic kidney disease (CKD). Patients who were regularly followed up at the nephrology clinics of National Taiwan University Hospital, aged between 18 to 75 years, daily activities-independent, had normal liver function, and had stage III, IV or V CKD were invited to join this study. The enrolled patients were then divided into two groups by simple randomization. Group 1 patients were asked to eat meat while Group 2 patients eat soy bean as their major sources of protein intake for a period of 6 months. Diet education for CKD was given at the start, the 3rd month, and the end of study. Demographic, clinical as well as laboratory data including serum biochemistry, lipid profile, interleukin-6, serum adiponectin, indirect calorimetry, and body composition were compared between the two groups both at the beginning and at the end of the study. There were 26 CKD patients who had finished the study, but only 23 of them had complete laboratory data. There was no statistical difference in the baseline demographic, clinical and laboratory data between Group 1 and Group 2 patients except for serum albumin level (4.7 ± 0.2 versus 4.4 ± 0.2 g/dl, P = 0.0013) (Table 1). There was neither any statistical difference in the baseline indirect calorimetry and body composition data between the two groups except for body fat percentage (23.1 ± 6.2 versus 28.9 ± 6.5%, P = 0.0380). After 6 months of intervention, Group 2 patients were noted to have significantly higher adiponectin level than Group 1 patients (–377.60 ± 9118.3 versus 9073.5 ± 9748.1 pg/mL, P = 0.0049) (Table 2). There was no statistical difference in indirect calorimetry change or body composition change between the 2 groups though Group 2 patients were on average lighter at the end of study (P = 0.0532).

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106 HYPOALBUMINEMIA IN PERITONEAL DIALYSIS PATIENTS

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This study aimed to determine the factors that were associated with hypoalbuminemia in peritoneal dialysis (PD) patients. End-stage renal disease patients who had received PD at the National Taiwan University Hospital for more than three months were included and divided into two groups. Patients who had mean serum albumin levels greater or equal to 3.5 g/dl were allocated to Group 1, while those who had mean serum albumin levels less than 3.5 g/dl were allocated to Group 2. Demographic characteristics, clinical parameters and laboratory data were then compared between the two groups. Logistic regression was also performed to identify the factors that were associated with hypoalbuminemia. There were 359 patients (mean age 54.3 years, male 46.5%) included. Group 2 patients (16.3%) were older (P = 0.0536), had lower body mass index (P = 0.0008), lower total Kt/V (P = 0.0600), and lower levels of hemoglobin (P = 0.0268), blood urea nitrogen (P = 0.0501), creatinine (P < 0.0001), triglyceride (P = 0.0014), potassium (P = 0.0028), phosphorus (P = 0.0036), but higher levels of C-reactive protein (P = 0.0194). More Group 2 patients had high or high-average peritoneal equilibration test (PET) (P = 0.0199). Using logistic regression, factors that were found to be associated with hypoalbuminemia were total Kt/V (P = 0.0015), hemoglobin (P = 0.0019), creatinine (P < 0.0001), triglyceride (P = 0.0060), and potassium (P = 0.0126). In conclusion, hypoalbuminemia in our PD patients was associated with total Kt/V as well as levels of hemoglobin, creatinine, triglyceride, and potassium.

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107 NUTRITIONAL INTERVENTION FOR MANAGEMENT OF OSTEODYSTROPHY (NIMO) PROGRAM IN HEMODIALYSIS PATIENTS, LEBANON AND BASELINE DATA

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Hyperphosphatemia in hemodialysis (HD) patients is considered to be the silent killer. Adherence to phosphorus restricted diets by HD patients is too low in the literature. This study aims to reveal the NIMO trial plan and the baseline characteristics of the study sample Adult stable patients (n = 750) were selected from 12 hospital-based HD units. Baseline patient characteristics were assessed during the 6 months prior to study initiation. HD units were randomly assigned to the study clusters: Cluster 1 (6 units, 370 patients) was divided into full intervention (A) and control groups (B) (as per shifts); where the full intervention received medical nutritional therapy (MNT) for 6 months as 2 hours/patient/month, delivered by externally recruited dietitians, fully dedicated to the unit. The hospital dietitian (blinded to study protocol) continued providing dietetic services as per existing practice to all patients. As for cluster 2 (6 units, 380 patients): partial intervention (C), where the MNT was delivered by the hospital dietitian after HD-specific nutritional training. It was not possible to have a control in cluster 2 for ethical reasons. Dietitians delivering the study protocol in group A and C received the same training by study coordinator based on the nutritional guidelines of Kidney Disease Outcomes Quality Initiative and trans-theoretical model. Key results at baseline were: Nutritional knowledge (%) of Group A, B, C was 40.14 ± 12.39, 38.2 ± 12.38 ± 12.74 respectively. Serum P (mg/dl) of Group A, B, C was 5.58 ± 1.15, 5.39 ± 1.45, 5.17 ± 1.44 respectively. The serum P of Group A was significantly higher than the other groups. Actual consumption of protein compared to needs (%) of Group A, B, C was 59, 64, 58 respectively. Frequency of hospital dietitian’s visits was < 1 time/patient/month; for all the 3 groups. The low protein intake and the inadequate frequency of dietetic consultation highlights the need of a nutritional program that would empower dietitians to get integrated the HD unit’s health care team and thus improve the quality of life of the Lebanese HD patients.

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108 DIETETIC PRACTICES IN ADULT HEMODIALYSIS UNITS COMPARED TO K/DQOI GUIDELINES, LEBANON

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Hospitals in Lebanon mostly employ only one dietitian to conduct all dietetic/food service/administrative tasks including hemodialysis (HD) units which are exclusively hospital based. Little is known about dietetic practices in these (HD) units. Kidney Disease Outcomes Quality Initiative (KDOQI) and American Dietetic Association (ADA) presented evidence that the presence of a competent dietitian in the HD unit has benefits on HD patient’s health and quality of life and is cost effective. This study aimed to reveal the current practices provided by dietitians to HD patients in Lebanon compared to KDOQI nutrition guidelines. A 36 item anonymous self-administered questionnaire was sent to all HD units in Lebanon (n = 55). The questionnaire included 2 sections: 1) demographics and professional characteristics; 2) routine clinical practice Thirty eight (69%) of the dietitians responded; only 34 were of use. The questions in survey were categorical, thus only the answers with the majority of the respondents will be reported: 97% were female. 82% were within the age of 21–34, 62% had 3–10 years in clinical practice and 44% had only 0–2 years exposure to renal patients. Most dietitians (69%) worked in hospitals with 50–150 inpatients and 26–75 HD patients. Sixty nine percent of dietitians spent more than 36 hours per week in the hospital, while 85% spent less than 10 hours per week in the HD unit. As to the level of applying KDOQI nutrition guidelines in routine practice, of the 23 guidelines asked, all dietitians used at least 1 guideline, 17% used 5 and 23% used 10 guidelines. Only one dietitian applied all guidelines. A total compliance to guidelines score was developed as a percentage of total compliance which showed 37 ± 15.51% (min14, max 73). Barriers identified were lack of time and lack of integration into the medical team. It is evident that dietetic practices in Lebanese targeting HD patients need support in all aspects: time, knowledge, empowerment and training.

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