dietitians. Control groups: Regular face to face counseling as well as attentions in follow-up is conducted by dietitians. Time arrangement for follow-up, 3 times within 24 weeks (week 4, 12 and 24 respectively). 180 cases completed the trail. Compared with control group, the test group patients’ compliance with DFI was better, 58.5 ± 6.8 vs 45.6 ± 8.9 g p < 0.05. The knowledge of diet protein score was higher than the control group, 19.4 ± 4.5 vs 11.3 ± 3.2 P < 0.01. The clinical data still had no difference. In Conclusion, the DPE is a new good tool for Chinese CKD patients.

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36 IMPACT OF RESIDUAL RENAL FUNCTION ON CHANGES OF BODY COMPOSITION IN DIABETIC CAPD PATIENTS

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Purpose: Preservation of residual renal function (RRF) in peritoneal dialysis patient is essential to improve clinical outcomes. Therefore, we conducted a prospective observational study to investigate the effect of low RRF in early period on body composition changes in CAPD patients.

Methods: Among new diabetic CAPD patients from May 2001 to December 2009 in our hospital, 92 patients who finished 12 month protocol (male: 48, mean age: 54.0 ± 11.0 years) were analyzed. Patients were assigned to 4 different dialysis solution (Dianeal n = 30, Physioveal n = 15 and Stay-safe n = 15, Stay-safe Balance n = 32). We defined the early low RRF group (n = 10) as less than 1.5 ml/min/1.73 m2 at 4 weeks after initiation of peritoneal dialysis. Daily ultrafiltration volume (UFV) and urine volume (UV), daily peritoneal glucose absorption, adequacy, residual renal function (RRF) and clinical indices were measured at 4 weeks and 12 months. The peritoneal equilibration test (PET) were performed at 4 weeks and 12 months. Body composition including body weight (BW), lean body mass (LBM) and fat mass were measured using bio-impedance analysis (BIA) at 4 weeks and 12 months. Delta LBM was calculated as LBM at 12 months minus LBM at 4 weeks. We analyzed the data by SPSS 17.0. Results: 1) Baseline characteristics between the early low RRF group and the non-early low RRF group were not significantly different. 2) There was significant positive correlation between RRF at 4 weeks and RRF at 12 months (p < 0.01). 3) The early low RRF group showed significant lower delta LBM than non-early low RRF group (3.1 vs. 0.95 kg, p < 0.05). There were no significant differences in body weight and fat mass between the two groups. 4) The early low RRF group showed significant lower serum albumin than non-early low RRF group (3.25 vs. 3.59 g/dL, p < 0.05) at 12 months. Conclusions: The low RRF in early period of peritoneal dialysis might be associated with body composition changes during the first year in CAPD patients. It is suggested that preservation of RRF in early period of peritoneal dialysis is important to improve nutritional status.

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37 EFFECTS OF A KETO/AMINO ACID SUPPLEMENTED LOW PROTEIN DIET ON THE DELAY OF PROGRESSIVE RENAL FAILURE IN CHRONIC KIDNEY DISEASE

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A protein-restricted diet with keto/amino acids (KA) supplement showed favorable effects on delayed renal replacement therapy in patients with chronic kidney disease. This is an open, prospective, randomized, and multi-center study. A total of 67 patients were randomly assigned into two groups. LPD + KA group was advised to take less than 0.6 g/kg/day of protein with KAs. LPD group was advised to consume less than 0.6 g/kg/day protein. Nutritional and clinical parameters were evaluated at baseline, 3 and 6 months. Nutritional status represented as body mass index, mid-arm circumference and triceps skin-fold thickness was not different between the two groups at 3 months and 6 months. Ca × P product level measured at 3 months was lower in the LPD + KA group than in the LPD group (LPD + KA group: 33.5 ± 5.0 vs. LPD group: 36.9 ± 7.9 mg2/dL2, p < 0.05). The slope of the glomerular filtration rate (GFR slope) and the percentage of the GFR slope (% at 3 months were more preserved in the LPD + KA group than in the LPD group. The GFR slope and GFR % at 6 months were not significantly different. In the entire subjects, the GFR slope was negatively correlated with Ca × P product levels at 3 months, total cholesterol at baseline, and urine protein-creatinine ratio at baseline and 6 months (r = −0.255, r = −0.296, r = −0.412, r = −0.371, p < 0.05). A multiple regression analysis revealed that Ca × P product at 3 months was the only independent factor affecting the GFR slope at 3 months. The present study suggests that a low protein diet supplemented with KA had a beneficial effect on preserving renal function and improving calcium and phosphorus disturbances in patients with chronic kidney disease.

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38 DOE BODY FAT MASS DEFINE SURVIVAL IN PATIENTS STARTING PERITONEAL DIALYSIS?

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Peritoneal dialysis (PD) is characterized by a gain in fat mass. In contrast to subcutaneous fat, visceral fat is associated with metabolic syndrome and survival. We prospectively examined whether the visceral or subcutaneous fat could define outcomes in patients undergoing PD. We studied 105 new patients (51 males) undergoing PD between February 2006 and April 2011. Baseline body composition was measured by computed tomogram. Visceral and subcutaneous obesity are defined as a visceral fat area > 100 cm2 and subcutaneous fat area > 130 cm2, respectively. Thirty-three and 25 patients were diagnosed with visceral and subcutaneous obesity, respectively. Nineteen patients had both visceral and subcutaneous obesity. The 1-year and 5-year survival rates were 91% and 75%, respectively. The peritonitis and exit infection rates were 0.36 and 0.13/patient-year, respectively. Patients with visceral obesity had poor outcomes compared with those without visceral obesity (p = 0.025). Subcutaneous obesity was not associated with peritonitis or survival. A multivariate Cox regression analysis did not show that visceral obesity was a risk factor of poor outcome. Increased visceral fat at the initiation of PD is not an independent predictor of poor outcome. The impact of visceral or subcutaneous mass for outcomes in patients undergoing PD would be better defined by large and long term studies.

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