

(GNRI) while assessing nutritional status in CRF patients on PD. Investigation was carried out in 112 patients with CRF on PD (50 men and 63 women aged 44 ± 14 years) during 19 ± 17 months. To assess nutritional status, a complex technique in modification by Bilbrey G.L.-Cohen T.L. was used as well as the malnutrition-inflammation score (MIS) and subjective global assessment (SGA). GNRI was calculated by the formula: $GNRI = [1,489 \times \text{albumin (g/dl)}] + [41,7 \times (\text{body wt/ideal body wt})]$. Disturbances of nutritional status were revealed based on the results of the complex technique in 57.1% of patients (mild disturbances – 35.7% and medium-severe–21.4%), on the results of MIS–in 53.6% (moderate – 47.3%, expressed–6.3%), on the results of SGA–in 52.7% (mild–25.9%, moderate–23.2%, expressed–3.6%), and on the results of GNRI–in 51.8% (low degree–27.7%, medium-high one–24.1%). GNRI inversely correlates with both the complex technique ($r = 0.665$, $p < 0.0001$) and MIS ($r = -0.702$, $p < 0.0001$), and directly correlates with SGA ($r = 0.634$, $p < 0.001$). Comparative analysis of three patient groups–without risk of nutritional disturbances (GNRI > 98), with a mild risk degree (GNRI 92-98), and with a medium-severe risk degree (GNRI < 92) – revealed reliable differences in the majority of nutritional parameters: anthropometric ones (body mass index, triceps skinfold thickness, arm circumference, and arm muscle circumference), biochemical (hemoglobin, albumin, C-reactive protein, and triglycerides), and bioelectrical impedance analysis (body fat mass).

GNRI is a simple technique available for the attending medical doctor as well as a highly informative test for assessment of patient's nutritional status and diagnostics of malnutrition in CRF patients on PD.

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200 CINACALCET IN TREATMENT OF THE SECONDARY HYPERPARATHYROIDISM RELAPSE IN PATIENTS ON DIALYSIS

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The incidence of the secondary hyperparathyroidism (HPT) after parathyroidectomy (PTE) in dialysis patients accounts for 10–80%. We present a case of the successful cinacalcet treatment of a female hemodialysis (HD) patient with HPT relapse. A female patient (aged 40 years) with the diabetes mellitus I (since 11 years of age) has been undergoing substitution therapy on continuous ambulatory peritoneal dialysis (CAPD) since October 2004. Insulin and erythropoietin treatment has been continued as well as taking phosphate binders with calcium and calcitriol analogs (with intervals due to hyperphosphatemia). Hb=117 g/L, Ca=2.2, P=1.8 mmoles/L, PTH=272 pg/ml, total alkaline phosphatase (AIP)=69 U/L (normal level 31-115), and Hb1C=9.2%. Since December 2007, the patient has been treated with HD (due to inadequacy of the CAPD ultrafiltration); in 2009, her left leg was amputated (gangrene). Taking into account uncontrolled HPT developed in the patient (PTH=2058 pg/ml, Ca=2.4, P=2.7 mmoles/L, and AIP=290 U/L), PTE was carried out in October 2007: enlarged (\emptyset 12 mm) right inferior parathyroid gland was removed, other glands weren't revealed. Patient's condition in postoperative period was satisfactory (PTH 70–120 pg/ml, Ca=1.5-1.9, P=1.3–1.5 mmoles/L, and AIP=145-68 U/L). Since 2009, the signs of the secondary HPT recurrence: PTH 1436 pg/ml., Ca=2.4, P=2.3 mmoles/L, and AIP=184 U/L. Increasing the dose of calcitriol analogs caused hypercalcemia and hyperphosphatemia. Ultrasound investigation and scintigraphy with ^{99m}Tc -technetium also have not revealed parathyroid glands. The negative dynamics was detected by the DEXA scanning shown by the T-scores at the hip, spine and left forearm. Cinacalcet treatment was started: the initial dose 30 mg/day, in a month – 60 mg/day, and in 6 months and till now – 45 mg/day. The sought-for values of the mineral-osteoseous metabolism have been achieved. Bone mineral density stabilized in the left forearm (1/3 radius T-score -3.7 vs. -3.8) and increased in the hip and spine (neck T-score Cinacalcet is an efficient preparation and may be one of choice for some patients to treat HPT relapses.

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201 THE STUDY OF MALNUTRITION IN ELDERLY PEOPLE OF KURDISTAN IN 2011

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Population aging is increasing in nutritional status plays an important role in health and disease, older people and is considered the most important factor. Elderly disability due to the inability to chew disease, drugs and social isolation and loss of income and physical activity in are receiving inadequate dietary exposure study to evaluate the status of malnutrition in elderly Province cholera research priorities according to the Ministry of Health Food, which was announced to all universities were 1010 elderly in this study based on random cluster sampling in the province (Urban and rural) were selected and their nutritional status questionnaire for the elderly Iranian MNA standardized assessment was to assess the relationship between nutritional status and demographic factors parametric Kolmogorov Smirnov tests were used.

Results: 57 / 7% of the subjects in the city and 42 / 5% lived in rural areas in terms of gender and 45 / 4% male and 54 / 6% female. BMI equal to 21% of the people and less than 22 and 79% have a BMI over 22 have. between gender and BMI, there was a significant relationship so that 73 / 3% of women and 65/3% of men in the group were overweight .28/6% of older people with malnutrition and 51/9% were at risk of malnutrition among places of life, psychological problems, malnutrition, drugs exact a significant relationship existed.

Conclusion: This study seems to take care intervention programs extensively by the health authorities and policymakers to prevent malnutrition in all age groups, especially the elderly appears necessary.

Keywords: Elderly - Malnutrition - BMI

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202 EFFECT OF PROBIOTIC-PREBIOTIC SUPPLEMENTATION WITH DIET COUNSELING IN CHRONIC KIDNEY DISEASE

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Chronic kidney disease (CKD) is a progressive disease leading to requirement of renal replacement therapy (RRT) over a period of time. Limited availability and high cost of RRT in many countries necessitates the researchers to focus on either prevention or slowing the progression of CKD. High dose probiotics have been hypothesized to metabolize the nitrogenous waste products, thus delaying the requirement of dialysis. The purpose of this short term intervention study was to study the effect of probiotic-prebiotic therapy and diet counseling on nutrition, renal progression, and overall health of CKD patients. Thirty predialysis CKD patients (21 males, 9 females) were included in the study. The diet charts were designed according to the underlying nutritional status and blood parameters. Calorie intake was 30–40 kcal/kg; proteins 0.6–0.8 g/kg (with at least 50% high biological value); potassium 1.5–2 gm./day; and phosphorus < 1 gm./day. All patients were prescribed enteric coated gelatin capsules containing lyophilized *Streptococcus Thermophilus*, *Lactobacillus Acidophilus*, and *Bifidobacterium Longum*, in a dose of 15 billion colony forming units along with 100 mg Lactitol monohydrate as prebiotic. Each patient received two capsules three times a day with each meal. The mean age was 45 years (range 18–68). The statistical analysis was done using 'RGui' software version 2.13.0 and the outcomes were tested using paired t-test at 5% level of significance. The mean calorie intake increased from 1479 kcal/day to 1869 kcal/day ($p < 0.0005$), with significant reduction in protein, phosphorus and potassium intake. There was significant improvement in body mass index ($p = 0.002$) and serum albumin levels ($p = 0.005$). All but four patients showed improvement or stabilisation of glomerular filtration rate (GFR), and the mean GFR improved from 24.72 ml/min to 27.73 ml/min ($p = 0.03$). There was also significant improvement in triglyceride and LDL cholesterol levels. Twenty five patients showed improvement in five point quality of life visual analogue score, while no patient reported any significant adverse event. In conclusion, this short term study of diet counselling with probiotic supplementation showed significant improvement in various parameters of CKD necessitating a longer term study.

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