Table 1. The characteristics of the patients according to sex and the values of Dietary Acid Load (DAL)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Variables** | **Male (n=42)**  X**±S** | **Female (n=38)**  X**±S** | **Total (n=80)**  X**±S** | **p value** |
| Age (years) | 55,3±8,16 | 54,9±8,03 | 55,1±8,05 | 0,937 |
| Weight before dialysis (kg) | 76,8±13,36 | 71,5±15,16 | 74,3±14,40 | 0,100 |
| Dry weight (kg) | 74,4±12,85 | 69,1±15,06 | 71,9±14,10 | 0,095 |
| BMİ (kg/m2) | 25,6±3,93 | 27,6±5,78 | 26.5±4,97 | 0,074 |
| Dialysis time (months) | 66,2±47,00 | 83,3±49,61 | 74,31±14,40 | 0,101 |
| Dietary acid load (mEq / day) |  |  |  |  |
| PRAL (mEq/gün)  (min-max) | 14,1±13,02  (-10,49-46,79) | 11,3±7,52  (-1,54-31,11) | 12,8±10,8  (-10,5-46,8) | 0,05\* |
| NEAP (mEq/gün)  (min-max) | 60,9±18,41  (-1,54-31,11) | 60,0±16,01  (35,56-116,01) | 60,5±17,21  (32,7-116,0) | 0,295 |

\*p<0.05

BMI; Body mass index, PRAL: Potential kidney acid load, NEAP: Net endogenous acid production

Table 2. The status of cardiovascular risk factors according to DAL values of patients

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Risk factors** | **S** | **DAL (mEq/gün)** | | | | | | | | |
| **PRAL** | | |  | | | **NEAP** | | |
| X**±S** | **p** | **OR (95 %CI)** | |  | X**±S** | | **p** | **OR (95 %CI)** |
| DM  Non-DM | 26  54 | 15,2±13,09  11,6±9,40 | 0,028\* | 0,632  (0,246-1,625) | |  | 60,1±17,75  60,7±17,11 | | 0,731 | 0,862  (0,338-2,199) |
| Smoking  Non-smoking | 14  66 | 12,1±8,82  12,9±11,21 | 0,445 | 2,032  (0,615-6,716) | |  | 61,1±18,97  60,3±16,97 | | 0,927 | 1,800  (0,545-5,946) |
| BMİ (kg/m2)  <23  ≥23 | 17 63 | 12,7±10,00  12,8±11,07 | 0,492 | 0,636  (0,215-1,883) | |  | 63,6±9,89  59,6±17,03 | | 0,971 | 0,560  (0,189-1,659) |
| SBP (mm Hg)  ≥130  <130 | 10  70 | 9,8±10,79  13,2±10,80 | 0,976 | 1,588  (0,412-6,122) | |  | 59,4±19,98  60,6±16,94 | | 0,619 | 0,892  (0,237-3,357) |
| DBP (mm Hg)  ≥85  <85 | 9  71 | 5,2±5,00  13,7±10,96 | 0,068 | 2,276  (1,733-2,989) | |  | 52,6±18,58  61,5±16,91 | | 0,841 | 3,000  (0,564-15,960) |
| Serum cholesterol (mg/dL)  ≥200  <200 | 24  56 | 13,4±11,34  11,3±9,42 | 0,691 | 0,788  (0,302-2,055) | |  | 58,6±15,31  61,3±18,03 | | 0,591 | 0,559  (0,210-1,486) |
| Serum triglycerides (mg/dL)  ≥150  < 150 | 51  29 | 13,2±10,83  11,9±10,85 | 0,386 | 0,897  (0,360-2,234) | |  | 60,2±16,15  60,9±19,22 | | 0,938 | 1,183  (0,474-2,954) |
| Serum HDL-C (mg/dL)  M <50, F <40  M >50, F >40 | 74  6 | 13,1±11,14  8,9±3,02 | 0,037\* | 0,179  (0,020-1,612) | |  | 60,8±17,83  56,2±3,83 | | 0,011\* | 0,200  (0,022-1,796) |
| Serum LDL-C (mg/dL)  ≥130  <130 | 15  65 | 12,6±8,07  12,8±11,37 | 0,289 | 0,848  (0,275-2,613) | |  | 61,8±15,95  61,2±17,59 | | 0,831 | 0,960  (0,312-2,956) |
| Serum hemoglobin (g/dL)  < 11  ≥11 | 22  58 | 13,6±7,75  12,5±11,78 | 0,159 | 0,603  (0,223-1,630) | |  | 63,9±18,48  59,2±16,69 | | 0,630 | 0,677  (0,253-1,815) |
| Serum hematocrit (%)  <33  ≥33 | 19  61 | 11,0±6,52  13,3±11,80 | 0,044\* | 0,871  (0,311-2,442) | |  | 63,3±22,01  59,6±15,53 | | 0,115 | 1,007  (0,359-2,824) |
| Serum CRP (mg/dL)  >10  ≤ 10 | 26  54 | 14,9±12,23  11,7±9,98 | 0,244 | 1,000  (0,392-2,549) | |  | 62,2±17,85  59,6±17,00 | | 0,745 | 1,160  (0,455-2,959) |
| Albumin (g/dL)  <3.5  ≥3.5 | 7  73 | 12,9±16,66  12,8±10,23 | 0,140 | 1,370  (0,286-6,559) | |  | 64,2±29,19  60,1±15,89 | | 0,019\* | 1,228  (0,257-5,878) |
| Phosphate (mmol/L)  >5.5  ≤5.5 | 27  53 | 14,0±10,82  12,1±10,82 | 0,895 | 1,118  (0,442-2,827) | |  | 59,6±13,57  60,9±18,90 | | 0,056 | 1,040  (0,411-2,630) |
| iPTH (pg/mL)  > 300  ≤ 300 | 53  27 | 12,3±11,40  13,7±9,61 | 0,568 | 0,355  (0,135-0,935) | |  | 59,1±16,91  63,1±17,82 | | 0,847 | 0,613  (0,241-1,560) |
| Calcium (mmol/L)  >10.2  ≤10.2 | 7  73 | 12,5±14,76  12,8±10,47 | 0,450 | 0,145  (0,017-1,268) | |  | 57,6±15,46  61,8±17,44 | | 0,317 | 0,479  (0,378-0,609) |

*\*p<0,05,*

*OR: Odds ratio, CI: Confidence interval, DM: Diabetes mellitus, BMI: Body mass index, DBP: Diastolic blood pressure, SBP: Systolic blood pressure, M: Male, F: Female, iPTH: Ionized parathormone*

**Table 3.** Multiple regression analysis of nutritional parameters of PRAL levels

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Variables** | **B** | **Standart devition** | **β** | **T** | **p** |
| Constant | 74,467 | 30,281 |  | 2,459 | 0,017 |
| Energy (kcal) | 0,011 | 0,003 | 0,475 | 3,969 | 0,000 |
| Protein (% energy) | 0,351 | 0,309 | 0,087 | 1,134 | 0,261 |
| Fat (% energy) | -0,964 | 0,316 | -0,527 | -3,046 | 0,003 |
| Carbohydrate (% energy) | -0,908 | 0,305 | -0,514 | -2,973 | 0,004 |
| Dietary fiber (g) | -0,00 | 0,048 | -0,063 | -2,057 | 0,044 |
| Potassium (mg) | -0,019 | 0,001 | -1,139 | -29,861 | 0,000 |
| Sodium (mg) | 0,000 | 0,000 | 0,033 | 1,161 | 0,250 |
| Calcium (mg) | -0,017 | 0,002 | -0,243 | -8,584 | 0,000 |
| Magnesium (mg) | -0,050 | 0,006 | -0,317 | -7,901 | 0,000 |
| Phosphorus (mg) | 0,052 | 0,003 | 1,314 | 18,852 | 0,000 |
| Cholesterol (mg) | -0,004 | 0,002 | -0,040 | -1,985 | 0,051 |
| SFA (g) | 0,042 | 0,081 | 0,032 | 0,513 | 0,610 |
| PUFA (g) | 0,072 | 0,064 | 0,054 | 1,122 | 0,266 |
| MUFA (g) | 0,011 | 0,066 | 0,007 | 0,158 | 0,875 |
| **R=0.995** | **R2=0.989** | **F=433.351** | **p=0.000** |  |  |

*SFA: Saturated fatty acids, PUFA: Polyunsaturated fatty acid, MUFA: Monounsaturated fatty acids*

**Table 4.** Multiple regression analysis of food groups of PRAL levels

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Variables** | **B** | **Standart devition** | **β** | **T** | **p** |
| Constant | 2,144 | 1,665 |  | 1,288 | 0,202 |
| Meat | 0,087 | 0,007 | 0,519 | 12,700 | 0,000 |
| Poultry | 0,091 | 0,012 | 0,304 | 7,514 | 0,000 |
| Fish | 0,083 | 0,025 | 0,132 | 3,339 | 0,001 |
| Egg | 0,112 | 0,020 | 0,255 | 5,702 | 0,000 |
| Milk products | 0,004 | 0,006 | 0,032 | 0,775 | 0,441 |
| Fruit | -0,030 | 0,005 | -0,259 | -6,235 | 0,000 |
| Vegetables | -0,043 | 0,004 | -0.508 | -10,995 | 0,000 |
| Potato | -0,069 | 0,010 | -0,281 | -7,048 | 0,000 |
| Cereals, bread | 0,047 | 0,005 | 0,421 | 10,087 | 0,000 |
| R=0.947 | R2=0.896 | F=67.008 | p=0.000 |  |  |