Nephrology Dialysis Transplantation 30 (Supplement 3): iii257–iii275, 2015
doi:10.1093/ndt/gfv180.27

DIALYSIS. PERITONEAL DIALYSIS - 1

FP575 IS KLOTHO GEN POLYMORPHISM (KGP) A CONTRIBUTING FACTOR IN DETERMINING THE RATE OF RESIDUAL RENAL FUNCTION LOSS IN PD PATIENTS?

Gülay Demirtaş[1], Sebahat Özden[2], Vural T Yılmaz[3], Gültekin Süleymanlar[3], Levent Donmez[4], Ramazan Çetinkaya[3] and Fevzi F Ersoy[3]
[1]Akdeniz University Medical School, Nephrology Department, Antalya, Turkey, [2]Akdeniz University Medical School, Biochemistry, Antalya, Turkey, [3]Akdeniz University Medical School, Nephrology, Antalya, Turkey, [4]Akdeniz University Medical School, Public Health, Antalya, Turkey

Introduction and Aims: In this study, we studied whether KGP might be associated with rapid decline of residual renal function in patients undergoing PD.
Methods: We conducted a single center, case-control study of 22 patients receiving PD. After performing genotypings of klotho, using polymerase chain reaction and high resolution melting methods, the subjects are classified into two groups according to have a KGP or wild type gene. Groups are matched on age, gender and having DM or not. The decline rate of residual renal function is defined as number of months while urine production is more than 300 ml per 24 hour (tRRF).
Results: There was no significant difference in decline rate of residual renal function (tRRF) between PD patients with KGP and that of wild type. Interestingly, high-density lipoprotein cholesterol (HDL-C) was significantly high in PD patients having KGP.
Conclusions: Results of our study suggest that KGP is not a contributing factor in determining the rate of RRF loss in PD patients. In harmony with the studies suggesting that some KGP's may be associated with low LDL-cholesterol levels in HD patients, our results suggest that KGP may cause higher serum HDL-cholesterol (HDL-C) levels in PD patients.

FP575 Table 1: Comparison of clinical and laboratory data between peritoneal dialysis patients with or without KGP

Parameter	KGP(+)(n=11)	Wild (n=11)	P value*
Age (years)	49±13	48±13	NS
Gender (F/M)	4/7	4/7	NS
DM(+/-)	3/8	3/8	NS
cCa**(mg/dl)	9.19±0.34	9.44±0.44	NS
Pi (mg/dl)	4.62±1.33	5.2±0.85	NS
cCaxPi	41.62±11.48	49.96±7.65	0.058
FGF23 (RU***)	717±586	1097±431	NS
25OH-D_3 (mg/mL)	10.46±5.17	12.20±10.67	NS
1,25OH-D_3 (mg/mL)	7.64±2.82	8.55±6.79	NS
iPTH (pg/dL)	380±311	407±398	NS
t-RRF (months)	39.7±30	44±22	NS
HDL-C (mg/dL)	46±9.4	35±7	0.001

* Student's t test, Pearson correlation, **cCa: corrected calcium, ***RU: Research unit

© The Author 2015. Published by Oxford University Press on behalf of ERA-EDTA. All rights reserved.

Downloaded from https://academic.oup.com/ndt/article/30/suppl_3/iii265/2512401 by Akdeniz Universitesi user on 20 September 2021