



THE RELATION OF 25-HYDROXY VITAMIN D LEVELS WITH FUNCTIONAL CHARACTERISTICS OF THE PERITONEUM IN PERITONEAL DIALYSIS PATIENTS

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INTRODUCTION AND AIM: "The aim of this study was to investigate the possible correlation of 25(OH)D levels with functional characteristics of peritoneal membrane in Peritoneal Dialysis (PD) patients"

25(OH) Vitamin D [25(OH)D] is the major circulating form of vitamin D and the parameter used to reflect vitamin D status. Patients with chronic kidney disease (CKD) are likely to have low levels of 25(OH)D and recent observations have linked suboptimal vitamin D status with adverse cardiovascular outcomes, inflammation, insulin resistance, and the rate of progression of renal insufficiency.

PATIENTS - METHOD : "This is a single center cohort study of 30 PD patients (20 male, 10 female) with mean values of"

Patients biochemical parameters

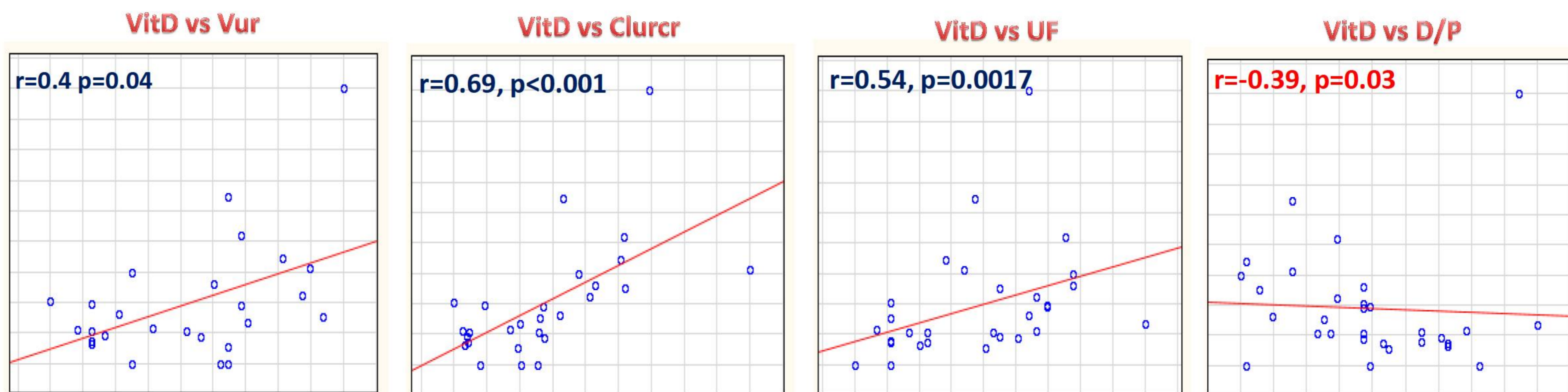
N= 30 (20M+10F)	Mean values ± SD
Age	63.21±15.9 years
PD duration	35.21±25.8 months
Kt/V total weekly	2.5±1.07
Daily urine volume	1021.15±627 cc
Clcrur	8.40±6.5 ml/min
D/Pcr (PET 4h)	0.69±0.12
UF (PET 4h)	328.66±206.34 ml
CA125 (PET 4h)	17.5±2.92 U/ml

N= 30 (20M+10F)	Mean values±SD
Ca ⁺⁺	9.01±0.55 mg/dl
PO ₄	4.49±1.17 mg/dl
iPTH	300±191.86 pg/ml
25(OH)D	8.97±5.82 ng/ml (φ.τ. 30-70).

The patients **did not** receive any vitamin D supplementation and their daily urine volume was **> 100 ml**

The mean values of 25(OH)D were 8.97±5.82 ng/ml, all of them below the normal values (30-70 ng/ml)

RESULTS: In this study, 25(OH)D levels were statistically significant correlated (Spearman's non parametric correlation) with



There was not any statistical significant relation with the mesothelial mass marker (CA125) even though there was a negative relation with PD duration

CONCLUSIONS:

Serum 25(OH)D levels correlated positively with solute transport as it's apparent from the negative correlation with dialysate to plasma (D/P) creatinine ratio and the positive correlation with ultrafiltration in PET test. As expected patients with the smallest PD duration and better residual renal function had better values of vitamin D. Whether the pleiotropic protective role of vitamin D supplementation will have an effect on peritoneal membrane status has to be proven in further studies

