

Correlation between ultrafiltration coefficient (LpA) and effective lymphatic absorption (rAR) in chronic ambulatory peritoneal dialysis patients; A ate (ELshift of paradigm?.

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OBJECTIVES: Seventy CAPD patients (40 male and 30 female, mean age 38.94 ± 17.59 year), with time duration of peritoneal dialysis of less than 2 years and no UF (ultrafiltration) failure entered this study. Each patient had between one to three peritoneal equilibration (PET) test results, these data as calculated by PDAdequest 2 software, were used to analyze the determinants of fluid transport and ultrafiltration in these patients.

Methods: Relative contribution of transcapillary water movement and lymphatic reabsorption in peritoneal dialysis is a critical issue especially in patients with ultrafiltration failure. In this study by using the routine results obtained by PDAdequest software we tried to re-evaluate this dichotomy of the separate effect of transcapillary water movement and lymphatic reabsorption on net ultrafiltration capacity in chronic ambulatory peritoneal dialysis patients (CAPD) with no ultrafiltration failure.

Conclusion: There is a significant correlation between; effective lymphatic reabsorption rate and ultrafiltration coefficient, in CAPD patients with no ultrafiltration failure and time duration of less than 2 years from the beginning of peritoneal dialysis.

RESULTS: Forty eight patients (55.60%) were high or high average transporters while 22 patients (44.4%) were classified as low and low average transporters. The volume of 24 hour ultrafiltration was significantly more in high or high average transporters compared with low and low average transporters (988.63 ± 333.78 ml versus 1337.50 ± 450.19, p-value = 0.029). We found no difference in high or high average transporters compared with low and low average transporters, regarding the values of effective lymphatic reabsorption rate (1.38 ± 1.08 ml/min versus 1.05 ± 1.10 ml/min) and ultrafiltration coefficient (1.34 ± 0.65 ml/min/mmHg versus 1.01 ± 0.61 ml/min/mmHg) both p-values were more than 0.05. But we found a positive and very significant correlation between effective lymphatic reabsorption rate and ultrafiltration coefficient (r = 0.689, p-value < 0.001). There was no correlation between these two parameters and creatinine clearance, kt/v or type of peritoneal membrane.

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