Optimization peritoneal dialysis treatment

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Objectives:

Conventional regime of continuous ambulatory peritoneal dialysis (CAPD) for most patients include 4 exchanges with same dwell daytime (4-5 hours) and long dwell at night (8-9hours). Majority patients treat glucose-based peritoneal dialysis (PD) fl This mode treatment has such problems: 1) rapid changes of transport characterist 2) difficulties in organizing work for patients, because they should make exchange middle of the workday

Aim: We investigate how new mode regime exchange (NMRE) - two short dwell tim (through 3hours) and two long dwell times (through 9h), it which be able to work patients, will be influence on peritoneal transport characteristics and adequacy treatment.

Methods:

We examined 30 patients on NMRE during 6 months. Patients were explored w peritoneal KT|V urea, daily ultrafiltration, ratio of the concentration of creatinine dialysate to its concentration in the blood (D / P creat) in the PET test. T parameters were investigated every 3 months. Control group was included 30 pa on standard regime exchange (SRE) with same ages, sex and time CAPD treatme patients used identical concentrations of glucose in PD solutions and fill volume (2l

Results:

Index adequacy KT/|V in NMRE group was 2,3±0,2 initially and it didn't statistics change after 3, 6 months. Patients on SRE had KT/V - 2,1±0,2 initially and it also c change with observations time. Volume ultrafiltration daily (UF) in NMRE group was ±0,4l and it didn't change, but in SRE group daily UF declined from 1,5±0,34 to 1,3±0,3l (p‹0,05), fig.1. D/P creat increased from 0,74±0,04 to 0,75±0,04 (p=0,05) 3 months and it increased to 0,77±0,04 after 6 months (p=0,003). Whereas D/P didn't change in NMRE group, fig.2.

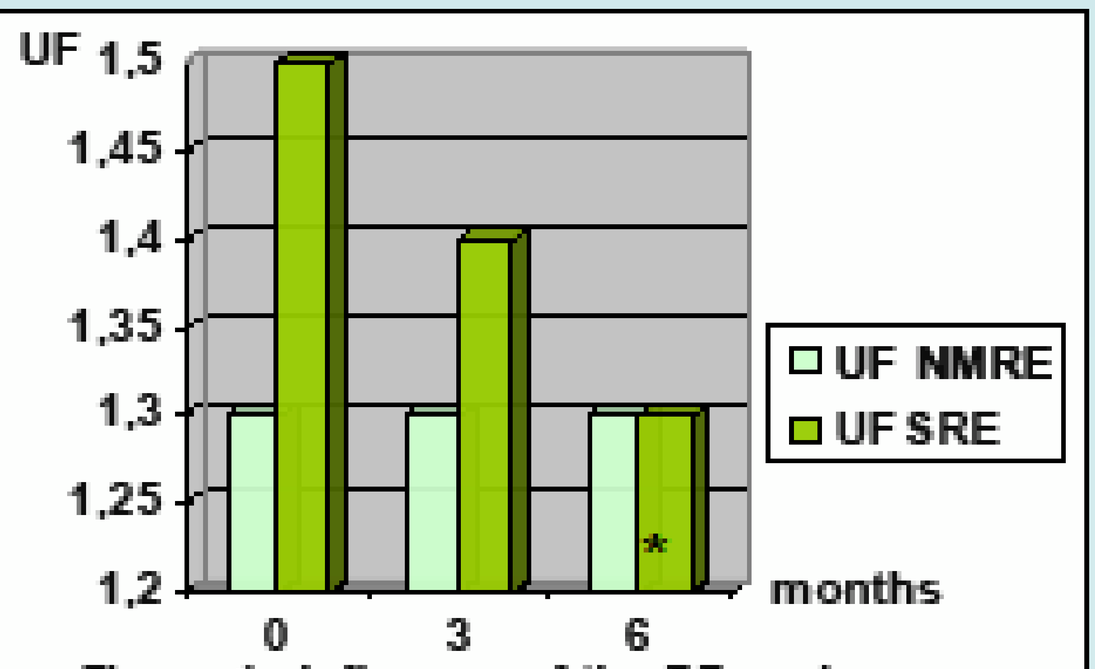

Figure 1. Influence of the PD regime on UF by time (*p<0.05 vs baseline date)

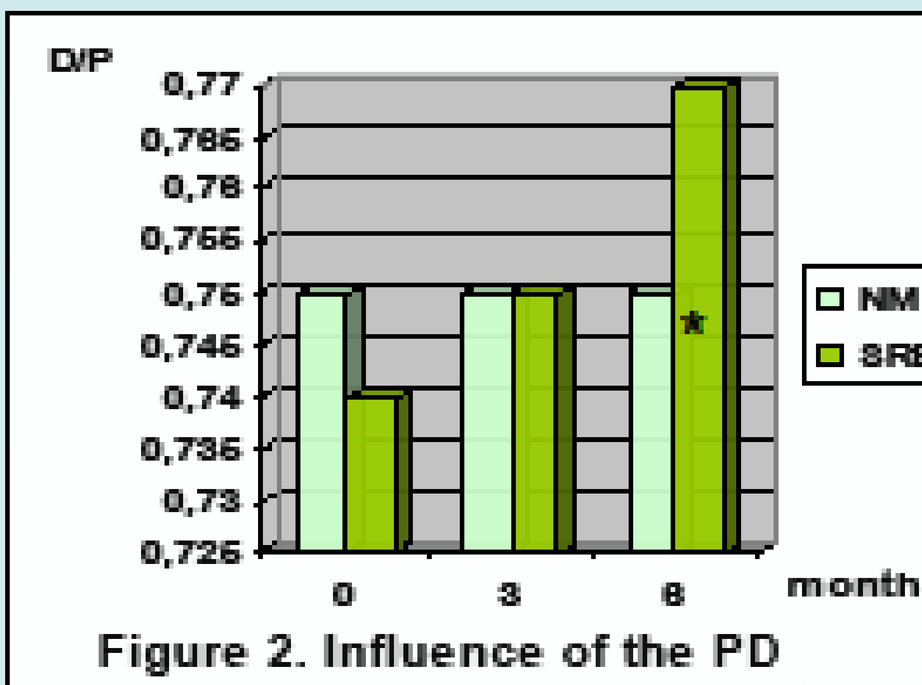

Figure 2. Influence of the PD regime on D/P by time (* p=0.003 vs baseline date

Conclusions:

NMRE regime is able to reduce negative influence glucose –based peritoneal di solutions on the peritoneum. This situation was confirmed by the absence of char D/P creat in NMRE group compared with the SRE group, it can explain to decrea the time exposure high concentration of glucose. Furthermore, NMRE regime is a use long dwell daytime for work without exchange dialysis solution.

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