

RISK FACTOR FOR 2-YEAR SURVIVAL OF INCIDENT PD PATIENTS: MULTICENTER STUDY



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INTRODUCTION AND AIMS: In many developed countries, peritoneal dialysis (PD) patients have better early survival and similar overall survival, when compared with patients treated with conventional in-center hemodialysis (HD). Despite the potential advantages, PD use is highly variable across countries and according to some reports, the proportion of dialysis patients treated with PD declined among developed countries. At the same time, relatively short technique survival compared to center-based HD remains a barrier towards increasing PD utilization. Data from developing countries are less known and the aim of the present study was to analyze technique and patients survival, including risk factor, among cohort of incident dialysis patients.

METHODS: This multicenter study included 62 incident patients from 12 dialysis centers in Serbia (who started CAPD during 2014), mean age 52±12 years. Initial data included demographic, underlying renal disease, laboratory data, comorbidity, residual renal function, self or assisted PD. In addition, risk factor for survival included data about peritonitis, ESI, hospitalization of any cause.

RESULTS: In 26 (42%) PD was the only solution, previous HD had 16 (26%) of patients (48 months mean)

Table 1. Data on incident CAPD patients

| At the start of CAPD | No, % |
|----------------------|------------|
| Mean age | 52±12 |
| Ethiology of ESRD | |
| DM | 22 (35%) |
| HTN | 16 (26%) |
| GN | 10 (16%) |
| APCKD | 5 (8%) |
| OTHER | 6 (10%) |
| UN | 3 (5%) |
| Diuresis | |
| <400 ml | 47 (76%) |
| >400 ml | 15 (24%) |
| Self CAPD | 40 (64.5%) |
| Assisted CAPD | 22 (35.5%) |
| Initial proscripton | |
| 4x2 | 54 (88%) |
| isotonic | 32 (60%) |
| Icodextrin | 5 (8%) |
| BMI | |
| <20 | 10 |
| 20-25 | 15 |
| 26-30 | 25 |
| >30 | 12 |

Table 2. Clinical parameters of incident CAPD patients

| At the start of CAPD | No, % |
|----------------------|----------|
| Malnutrition | 35 (57%) |
| Serious malnutrition | 9 (17%) |
| CRP>10 mg/L | 35 (57%) |
| Hb<10g/L | 44 (72%) |
| Hyper P | 22 (35%) |
| Hypocalcemia | 28 (45%) |

Table 3. Modality-related complications

| Complications | No, % |
|------------------------------------|-----------|
| Peritonitis incidence | 1/84 ptm |
| ESI incidence | 1/281 ptm |
| Catheter malfunction (replacement) | 9 (14.5%) |
| Hernias | 0 |
| Hospitalizations | 1/36 ptm |
| Method-related | 1/60 ptm |

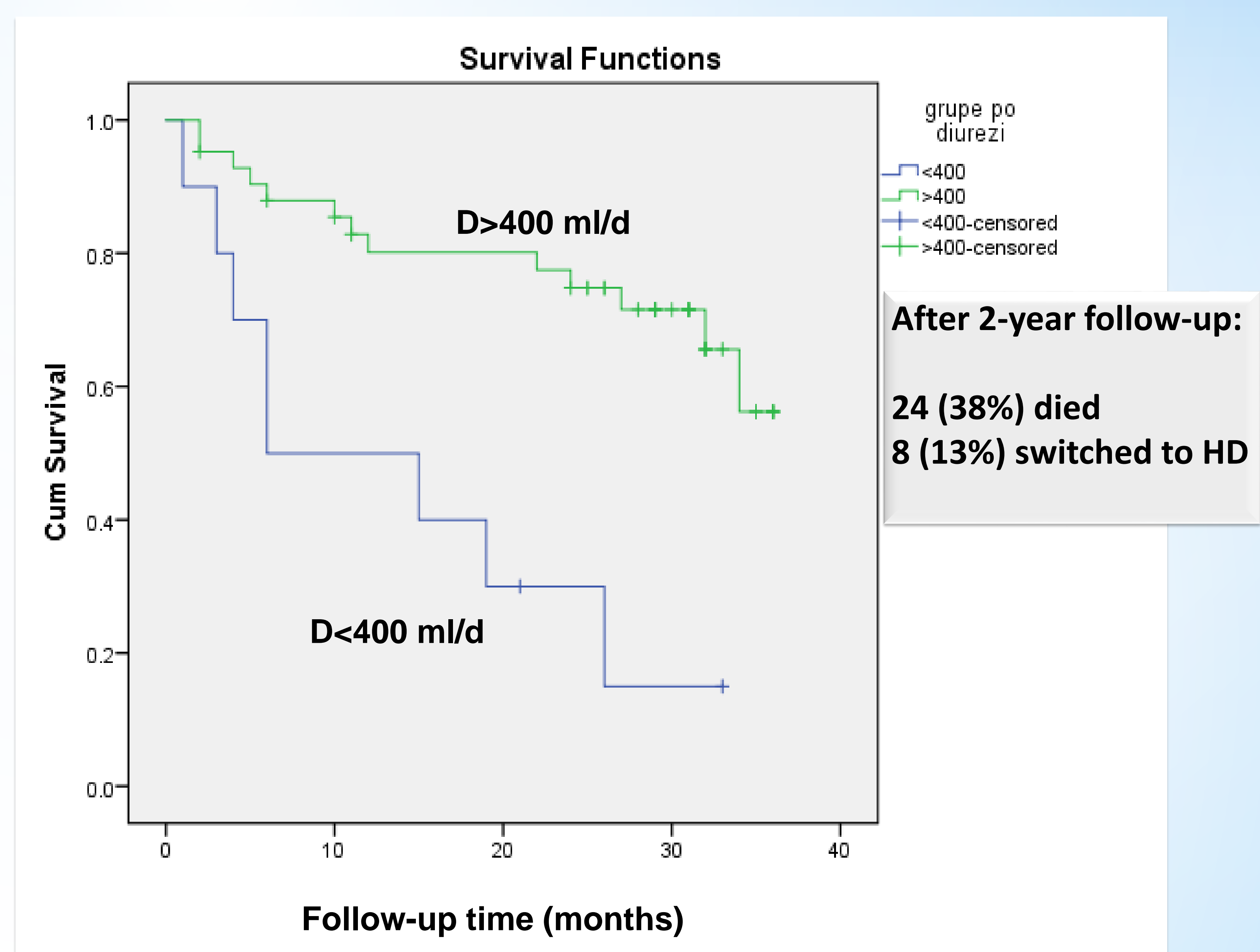


Figure 1. Survival of incident CAPD patients according to RRF

Univariate Cox regression analysis confirmed that significant RF for Mt were age, diuresis <400ml, having assistance in PD exchanges, PD as self choice, CRP, serum albumin, Tsat and PD catheter replacement. However, multivariate analysis marked diuresis <400ml as the only significant predictor of death

CONCLUSION: Patient selection for CAPD was very unfavorable with high two-year mortality. Among multiple risk factors, residual renal function at the start of CAPD was the only significant RF for Mt.