

中文題目：比較快速下降的殘餘腎功能和初始無尿對於腹膜透析病人的長期影響

英文題目：Comparison of the impact of “fast decline” in residual renal function and “initial anuria” on long-term outcome in CAPD patients

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Back ground: Residual renal function (RRF) is pivotal to long-term outcomes, while rapid RRF decline (RRFD) is associated with mortality risk for continuous ambulatory peritoneal dialysis (CAPD) patients. This study was conducted to compare the impact of “initial anuria” and rapid RRFD on the long-term prognosis of CAPD patients.

Method: According to the timing of anuria and the slope of RRFD, a total of 255 incident CAPD patients were divided into 3 groups. For the “anuria” group, anuria was detected from CAPD initiation and persisted for > 6 months (n = 27). Based on the median of the RRFD slope, the other 228 non-anuric patients were divided into a “slow decliner” group (n = 114), and a “rapid decliner” group (n = 114). The maximal observation period was 120 months.

Result: Logistic regression tests indicated that the “anuria” group was associated with previous hemodialysis > 3 months (odds ratio [OR]: 8.52, 95% confidence interval [CI]: 3.12 – 23.28), and female (OR: 0.29, 95% CI: 0.09 – 0.90), while the “fast decliner” group with higher Davies co-morbidity scores (DCS) (OR: 1.52; 95% CI: 1.08 – 2.14), body mass index (BMI) (OR: 1.12; 95% CI: 1.04 – 1.21), and male (OR: 1.12; 95% CI: 1.04 – 1.21). After adjusting for DCS, the “fast decliner” group (hazard ratio [HR]: 0.37; 95% CI: 0.17 – 0.80) showed a better outcome than that of the “anuria” group (reference: 1). Both baseline RRF (xxb = -0.24; $p < 0.001$) and DCS (xxb = -3.76; $p < 0.001$) showed inverse linear correlations to the slope of RRFD. From the Cox proportional analyses, higher baseline RRF (HR: 0.92; 95% CI: 0.88 – 0.97) and higher slope of RRFD (slower decline in RRF) (HR: 0.90; 95% CI: 0.85 – 0.96) were independent factors for less mortality risk in patients with DCS = 0. However, only a higher slope of RRFD (HR: 0.97; 95% CI: 0.94 – 0.99) was significant for better survival in CAPD patients with DCS > 0.

Conclusion: Compared to the baseline RRF, CAPD patients with co-morbidities that rapidly deteriorate RRFD are more crucially associated with long-term mortality risk.