

# NOT TOO LATE INITIATION OF DIALYSIS COULD IMPROVE SURVIVAL IN HEMODIALYSIS PATIENTS FROM BEIJING: EXPERIENCE OF 6 YEARS' FOLLOW-UP

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## BACKGROUND:

Optimal time to initiate dialysis for end stage renal disease patients is still a controversial question. Studies done recently challenged early initiation trend of dialysis. We conducted the study to evaluate the relationship between GFR and mortality in hemodialysis (HD) patients in Beijing.

## METHODS:

A total of 5612 incident HD patients enrolled in the database from January 2007 to December 2012. eGFR was estimated by the CKD-EPI equation according to the creatinine at the start of dialysis. Patients were classified into five groups based on eGFR (Group 1: 0-2.5, Group 2: 2.5-5.0, Group 3: 5.0-7.5, Group 4: 7.5-10.0 and Group 5: above 10.0 ml/min/1.73m<sup>2</sup>). Kaplan-Meier and Cox regression analyses were performed to assess the association between eGFR and all-cause mortality. The Cox regression model included pre-dialysis eGFR, age, gender and primary renal disease.

## RESULTS:

The eGFR at dialysis initiation was 8.88±13.69 ml/min/1.73m<sup>2</sup>. During the six years' follow-up, 17.18% patients died. The Cox regression model revealed increasing mortality risks was not only in the higher eGFR groups (Group 3 (HR=1.28, 95%CI=1.08-1.53), 4 (HR=1.39, 95%CI=1.13-1.71) and 5 (HR=2.29, 95%CI=1.90-2.76)), but also in Group 1 (HR=1.68, 95%CI=1.15-2.45), compared to Group 2 after adjusted for age, gender and primary renal disease (chronic glomerulonephritis, diabetic nephropathy, hypertensive nephropathy, chronic tubulointerstitial nephritis, polycystic kidney disease and others).

## CONCLUSIONS:

Initiation of dialysis at higher levels of eGFR was associated with increased mortality in HD patients in the long follow-up period. Meanwhile, too low eGFR (<2.5 ml/min/1.73m<sup>2</sup>) might also induce to higher mortality. The factors related need further studies.

Distribution of eGFR of the incident patients in different years

