

PREDICTORS FOR START OF DIALYSIS IN CKD-5 SUBJECTS

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INTRODUCTION AND AIMS:

Recent data suggest HD treatment may be safely delayed till estimated Glomerular Filtration Rate (eGFR) values reach levels decisively lower than those suggested by current Guidelines. In this changing scenario of conservative management of stage 5 CKD determinants of progression remain to be define. To gain insight into this issue, we retrospectively evaluated patients who entered our CKD out-patient clinic with eGFR (MDRD) ≤ 15 ml/min/1.73m² from January 2001 to december 2010 and eventually were started on dialysis

METHODS

Cox proportional hazards regression modelling was applied with primary end point entry into dialysis. Covariates tested were age, comorbidities, diabetes, systolic BP, ACEi therapy, eGFR, K⁺, PO₄, HCO₃⁻, Hb

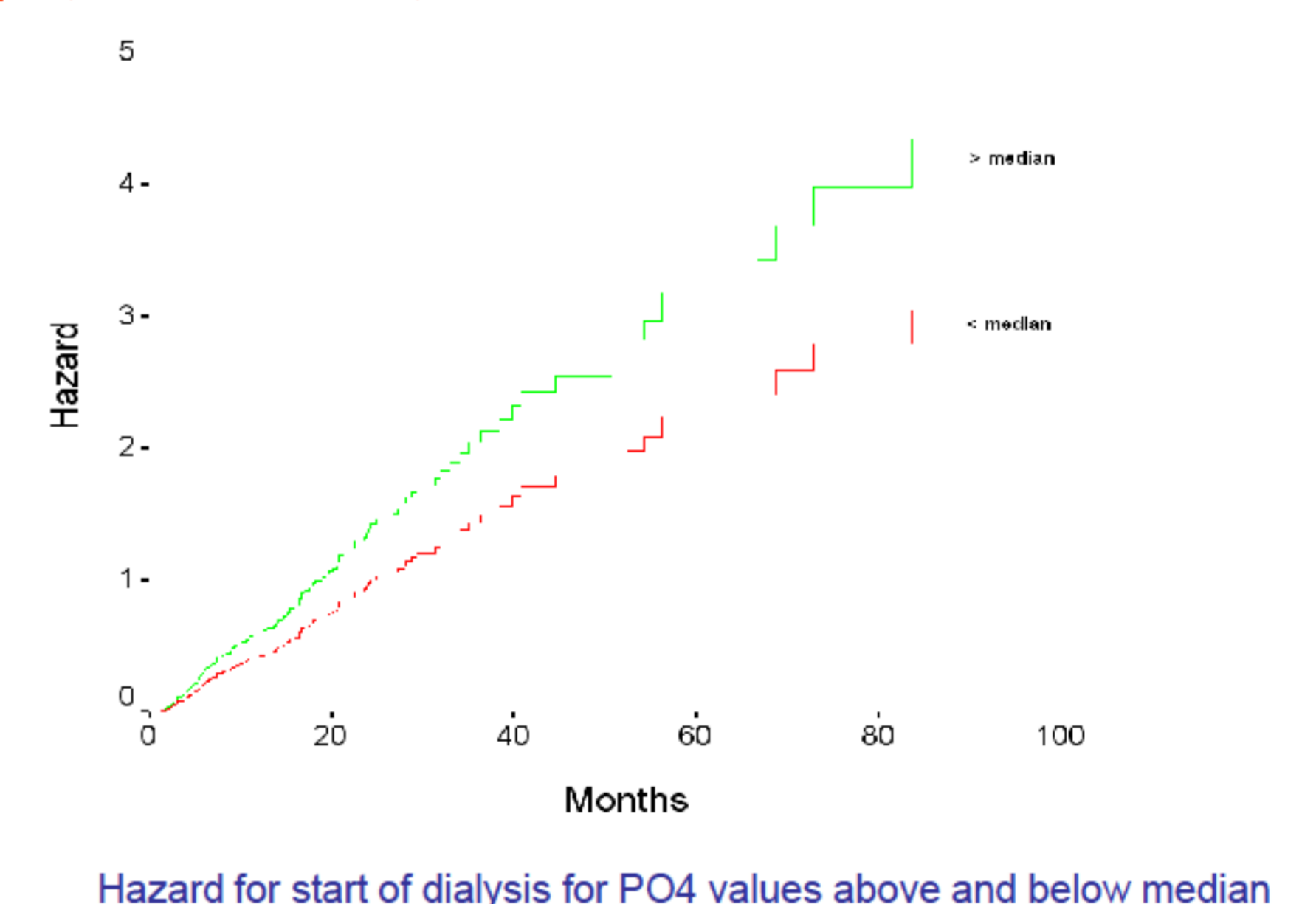
RESULTS

Two hundred and five patients entered our CKD stage 5 out patient clinic with mean eGFR 9.4 ± 2.7 ml/min. After an average of 14-month follow up, they started dialysis with mean eGFR 6.1 ± 1.9 ml/min. Multivariate analysis identified higher serum phosphorus, higher proteinuria, lower eGFR values at study entry as the only covariates predicting dialysis start. Moreover ACEi treatments protect.

Study population (n)	Age (y)	Comorbidities (%)	Diabetes (%)	SBP	Hb (g/dl)	K ⁺ (mmol/l)	HCO ₃ ⁻ (mmol/l)	ACEi (%)	PO ₄ (mg/dl)
205	70 14.3	63	28	147 21	11.2 1.7	4.7 .7	21.5	55	4.9 1.3

	Hazard	95 % CI	p
PO ₄	1.25	1.08-1.44	0.03
ACEi	.98	0.97-0.99	0.003
eGFR	.96	0.93-0.99	0.009
U-PROT	1.15	1.08-1.21	0.000

Cox regression for start of dialysis



CONCLUSIONS

We conclude that in CKD as advanced as stage 5 high serum phosphorus level and 24 hour proteinuria are till independent predictors of progression to dialysis. Moreover ACEi maintain protective effect on progression. Our data suggest dialysis treatment may be safely delayed of more than one year.

