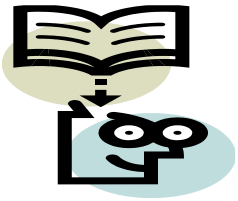

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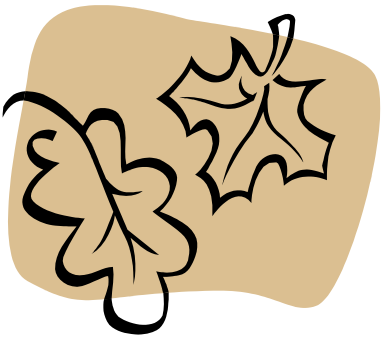

Table Of Contents

Key words

Chronic rkidney failure – Residual Kidney Function – haemodialysis – urine output – glomerular filtration rate

List of abbreviations

ACE inhibitor	***Angiotensin converting enzyme inhibitor***
ARBs	***Angiotensin receptor blockers***
AVF	***Arterial-venous fistula***
BUN	***Blood urea nitrogen***
CANUSA	***Canada and USA study***
CKD	***Chronic Kidney Disease***
CRP	***C- reactive protein***
eGFR	***Estimated glomerular filtration rate***
HD	***Hemodialysis***
MDRD	***Modification of Diet in Renal Disease***
PD	***Peritoneal Dialysis***
PTH	***Parathyroid hormone***
QOL	***Quality of life***
RKF	***Residual Kidney Function***
SGA	***Subjective global assessment***
TIBC	***Total iron binding capacity***
TSAT%	***Transferring saturation***
URR	***Urea reduction ratio***

Table Of tables

Table Of figures

Thesis Submitted for partial fulfillment of M.D degree in Nephrology

The effect of Residual Kidney Function on Outcome in hemodialysis patients

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The effect of Residual Kidney Function on outcomes in hemodialysis patients

**Introduction:*

Preserving residual renal function has always been the primary clinical goal for every nephrologist managing patients with chronic kidney disease. There is no reason why this important goal should not extend to patients with stage 5 chronic kidney disease receiving dialysis. .[1]

During the past few years, it has become increasingly evident that residual renal function (RRF) is an important and independent predictor of poor outcome in patients with chronic kidney disease (CKD)..[2]

Initiation of dialysis is associated with gradual loss of RRF over time. As compared with hemodialysis, peritoneal dialysis is reported to be associated with a slower decline of RRF. Also, RRF depends on several factors that may affect its

decline independent of dialysis. The analysis of RRF decline on dialysis is therefore complex. .[3]

The important association between residual renal function and survival in dialysis patients was first reported in the mid 1990s by Maiorca et al.[4] *They evaluated residual renal function as a separate factor and showed that the persistence of residual renal function conferred survival benefit in peritoneal dialysis patients. .*[4] *Several subsequent cohort studies observed similar findings that residual renal function but not the dose of peritoneal dialysis was a powerful predictor of survival in patients on peritoneal dialysis.*[5]

The importance of residual renal function (RRF) during dialysis is increasingly being recognized. In dialysis patients, RRF is an independent predictor of actuarial patient survival. Each 1 mL/min of RRF [measured as the glomerular filtration rate (GFR)] is associated with a nearly 50% reduction in the rate of mortality.[6]