

Reversibility of CKD decreases mortality among type 2 DM patients lacking proteinuria

Mordecai Popovtzer^{1,2}, Bijin Thajudeen^{1,2}, Pooja Budhiraja^{1,2} and Edward A. Meister²

¹South AZ VA Health Care System, USA

²Department of Medicine University of Arizona, USA

Background: Diabetic nephropathy is the most common etiology for ESRD in the developed world. Twenty percent of the diabetics progress to Chronic Kidney Disease (CKD) without albuminuria. Determinants of CKD, natural course of renal dysfunction, and mortality in this subgroup of diabetics has not been studied in great detail.

Methods: In a retrospective study design we followed medical records of 121 patients (all males) above the age of 40 years with Type 2 DM and CKD in the absence of proteinuria. Outcomes measured were 1) all-cause mortality 2) requirement for hemodialysis 3) appearance of proteinuria 4) trend in the kidney function expressed as improvement or worsening of eGFR.

Results: All-cause mortality was 33% with mean age of death of 75.9. 63% of the patients had improvement in eGFR. Mortality was higher in patients with worsening eGFR compared to those who had improvement in eGFR (61.3% vs. 38.7%, $p=0.045$). Most common cause of death was cardiovascular disease. 5.8% of the patients ended up in hemodialysis. 16% of the patients developed proteinuria at end of follow up and these patients showed higher tendency for progression of renal failure. Multivariate logistic regression for improving versus worsening eGFR trend revealed no statistically significant predictors.

Conclusions: This observation study suggests that in Type 2 diabetic patients with chronic kidney disease, a substantial number of patients will have improvement in eGFR. Careful search for kidney damaging causes that are potentially reversible could subsequently improve mortality.

Biography

Mordecai Popovtzer completed his Fellowship in Nephrology & Metabolism at Cedars-Sinai, and UCLA at the age of 33. He was the Director of Hemodialysis & Associate Professor of Medicine at the University Of Colorado School Of Medicine at age 35. Currently he is the Chief of Nephrology since 2003 at the South AZ VA Health Care System & Professor Department of Medicine, University of Arizona. He has published 234 papers (200 peer reviewed journals) and 4 chapters in Nephrology Text Books. He is the elected member at American Society of Clinical Investigation ("Young Turks") and has chaired multiple ASN sessions. He is the editor for several reputed journals.

mpopovtzer@hotmail.com