

POSTER ABSTRACTS
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Chronic Disease
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CLINICAL CHARACTERISTICS OF CHRONIC KIDNEY DISEASE (CKD) AND ASSOCIATED DISEASE PROGRESSION.

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Background: Although CKD is the most common antecedent to end-stage renal disease, natural history research is lacking.

Methods: Using electronic data at Kaiser Permanente Northwest, we characterized baseline comorbidities and outcomes among 20,816 adults with glomerular filtration rates (GFR ml/min/1.72m²) less than 90 (from MDRD estimation) on two consecutive measurements (at least 90 days apart) in 1996. Patients were divided into three groups: Group 1 (GFR=60-89;n=9,076); Group 2 (GFR=30-59;n=10,977); and Group 3 (GFR=15-29;n=763). Patients in Group 1 had the additional inclusion criteria of diagnosed hypertension and/or proteinuria (≥ 2 protein on dipstick UA without a positive leukocyte esterase). Patients were followed from the date of their index GFR until death, initiation of renal replacement therapy (RRT), health plan disenrollment, or until July 1, 2001.

Results: Coronary artery disease was present in 13.8%, 17.8% and 25.2% (Groups 1, 2 and 3, respectively), congestive heart failure in 4.1%, 9.7% and 21.5% (Groups 1, 2 and 3, respectively), diabetes in 19.2%, 17.4% and 28.4% (Groups 1, 2 and 3, respectively), and peripheral vascular disease in 2.8%, 4.4% and 8.9% (Groups 1, 2 and 3, respectively). Mean follow-up was 52.3 months, and 10% of patients disenrolled. A total of 11.4% of Group 1 patients, 24.5% of Group 2 patients, and 45.7% of Group 3 patients died during the follow-up period. RRT initiation was rare in Group 1 (0.23%) and Group 2 (1.3%), but higher in Group 3 (20.4%).

Conclusion:

Lower GFR was associated with increased age and comorbidities. In every disease group, more patients died than initiated RRT. Further follow-up and analysis of this cohort will yield important insights into the natural history of CKD.