

CHARACTERISTICS OF THE INCREASING POPULATION OF ELDERLY DIABETIC ESRD PATIENTS: LATEST USRDS DATA.

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The elderly (≥ 75 years old) are among the fastest-growing categories of incident dialysis patients. When our USRDS analysis indicated even greater growth in the diabetic elderly, we studied differences in baseline characteristics and outcomes compared to non-diabetic ESRD elderly. We also hypothesized that diabetic patients would require higher rates of hemodialysis catheter use and would have more infectious deaths than elderly non-diabetic patients.

We used the USRDS data from 1995 to 2005 to evaluate trends in incidence and outcomes, and the latest USRDS data (1/1/2005 through 9/30/2006) to determine baseline characteristics of the elderly diabetic (n=21860) and non-diabetic (n=23465) populations.

The proportion of incident dialysis patients who were both elderly and diabetic increased steadily from 8.7% to 13.0% between 1995 and 2005. Compared to non-diabetic elderly patients, they were slightly younger at the initiation of dialysis (80.5 vs. 82.0 y, $p < 0.001$) and had lower starting serum creatinines (5.16 ± 0.01 vs. 5.80 ± 0.02 mg/dl, $p < 0.001$) despite higher weight (75.3 vs. 68.5 kg, $p < 0.001$). There were similar rates of pre-dialysis nephrology care (60% vs. 58 %). The type of dialysis ($>95\%$ HD) and vascular access (catheter use 82.3% vs. 81.1%) at the time of initiation were not different. Charlson index was greater in diabetics. While mortality rates were high in both groups (roughly 50% at one year), a multivariate Cox regression model, not adjusted for comorbidities, indicated a 12% greater mortality risk associated with diabetes. The proportion of deaths from infection was increased in diabetics (12.8% vs. 9.8% of deaths, $p < 0.001$).

The growing population of elderly diabetic ESRD patients appears to initiate dialysis at a younger age and to have lower serum creatinine levels than elderly non-diabetics, implying a higher level of residual kidney function. Mortality rates far exceed those of the general ESRD population, with a significantly higher rate of infectious death in the diabetic elderly. Contrary to expectation, diabetes does not increase the high rate of catheter use at dialysis initiation in the elderly.