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**Association of short stature with an increased risk of end-stage renal disease in type 2 diabetic patients: a nationwide population-based cohort study**

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**Objectives:** Short stature has been associated with increased various disease and all-cause death, but no reliable data exist the association between adult height and end-stage renal disease (ESRD) in diabetic patients. We investigated the relationship between short stature, development of ESRD, and mortality in type 2 diabetes mellitus.

**Methods:** This retrospective cohort study analyzed clinical data from patients with type 2 diabetes mellitus using the National Health Insurance Database in Korea. Height was stratified by five groups according to age and sex, and risk of ESRD and all-cause mortality was analyzed with Cox proportional hazards models.

**Results:** During a 6.9-year follow-up period, 220,457 subjects (8.4%) died and 28,704 subjects (1.1%) started dialysis. Short stature significantly increased the incidence of ESRD and all-cause mortality in the overall cohort analysis. In multivariable Cox models, hazard ratios (HR) for development of ESRD comparing the highest versus lowest quartiles of adult height were 0.86 (95% confidence interval (CI), 0.83–0.89). All-cause mortality also decreased with highest height compared to patients with lowest height after fully adjusting for confounding variables (HR 0.79, 95% CI, 0.78–0.81). Adult height had an inverse relationship with newly diagnosed ESRD (Male: HR 0.86, 95% CI 0.83–0.90, Female: HR 0.84, 95% CI 0.79–0.90) and all-cause mortality (Male: HR 0.81, 95% CI 0.79–0.82, Female: HR 0.80, 95% CI 0.78–0.82) in both males and females.

**Conclusions:** Short adult stature is strongly associated with an increased risk of ESRD development and all-cause mortality in type 2 diabetes mellitus.