

Among incident hemodialysis patients ≥ 80 years of age, placement of an AVF from a CVC within the first year of dialysis had similar mortality compared with initial AVF use. Our data suggest that initial CVC use with later placement of an AVF may be an acceptable option among elderly hemodialysis patients” Ko et al(2018).

Abstract:

BACKGROUND: Arteriovenous fistulas (AVFs) are the preferred vascular access type in most hemodialysis patients. However, the optimal vascular access type in octogenarians and older (≥ 80 years) hemodialysis patients remains widely debated given their limited life expectancy and lower AVF maturation rates.

METHODS: Among incident hemodialysis patients receiving care in a large national dialysis organization during 2007-2011, we examined patterns of vascular access type conversion in 1 year following dialysis initiation in patients < 80 versus ≥ 80 years of age. Among a subcohort of patients ≥ 80 years of age, we examined the association between vascular access type conversion and mortality using multivariable survival models. **RESULTS:** In the overall cohort of 100 804 patients, the prevalence of AVF/arteriovenous graft (AVG) as the primary vascular access type increased during the first year of hemodialysis, but plateaued thereafter. Among 8356 patients ≥ 80 years of age and treated for > 1 year, those with initial AVF/AVG use and placement of AVF from a central venous catheter (CVC) had lower mortality compared with patients with persistent CVC use. When the reference group was changed to patients who had AVF placement from a CVC in the first year of dialysis, those with initial AVF use had similar mortality. A longer duration of CVC use was associated with incrementally worse survival.

CONCLUSIONS: Among incident hemodialysis patients ≥ 80 years of age, placement of an AVF from a CVC within the first year of dialysis had similar mortality compared with initial AVF use. Our data suggest that initial CVC use with later placement of an AVF may be an acceptable option among elderly hemodialysis patients.

Reference:

Ko, G.J., Rhee, C.M., Obi, Y., Chang, T.I., Soohoo, M., Kim, T.W., Kovesdy, C.P., Streja, E. and Kalantar-Zadeh, K. (2018) Vascular access placement and mortality in elderly incident hemodialysis patients. *Nephrology, Dialysis, Transplantation*. August 9th. .

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