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ASSOCIATION OF INTRADIALYTIC HYPOTENSION EVENTS WITH ALL-CAUSE MORTALITY IN HEMODIALYSIS PATIENTS.

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Intradialytic hypotension (IDH) is a well-known complication in maintenance hemodialysis patients. Historically, there was sparse evidence to link IDH event frequency with mortality. Recent observational studies are now shedding light on this association, but are low-powered. We aim to examine associations of IDH event frequency with all-cause mortality in a large cohort of US HD patients. We hypothesize that increased frequency of IDH is incrementally associated with all-cause mortality.

We examined the association of IDH event frequency (defined as the proportion of HD treatments where patient's nadir SBP was less than 90) within the 1st 91 days of HD treatment

(baseline quarter) with all-cause mortality in a study cohort of incident adult HD patients receiving care from a US based large dialysis organization between 2007–2011. Associations were examined using Cox proportional hazard regression models with restricted cubic splines and multivariable adjustment for case-mix, comorbidities, and laboratory covariates).

In a cohort of 112,013 HD patients, there were 29,245 observed deaths over 5 years. Proportion of dialysis treatments with IDH events in the 1st 91 days of dialysis (reference: 0 IDH episodes) was linearly and incrementally associated with a higher risk of mortality. Results were robust across all levels of adjustment and in examining mortality associations in the 1, 2, and 5 years of follow up. Further studies are warranted to determine a definitive definition for IDH and NI-SBP goals for optimum patient care.

