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DOES DIALYSIS ADEQUACY AFFECT THE ASSOCIATION OF INTRADIALYTIC HYPOTENSION WITH HIGHER DEATH RISK?:

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Nadir intradialytic systolic blood pressure (niSBP) based definitions of intradialytic hypotension (IDH) appear to have the greatest association with mortality; the confounding role of dialysis adequacy is not clear in this association. We hypothesized that in patients with lowest Kt/V IDH will have a stronger association with death risk.

We examined the association of niSBP, change (Δ) in iSBP and frequency of IDH with 5-year (2007–2011) mortality stratified by single-pooled delivered Kt/V

values in a cohort of 112,013 incident adult HD patients using Cox models with adjustments for case-mix, comorbidities, and lab covariates. Δ iSBP was defined as pre-HD SBP minus niSBP. Frequency of IDH was defined as the proportion of HD treatments where patient’s niSBP was < 90 mmHg.

We found in subgroups of lower Kt/V (<1.2 to 1.4), there was a trend of higher death risk with both niSBP<90 mmHg (Figure A) and frequency of IDH >40% (Figure B), p<0.01 for both. In niSBP \geq 140 mmHg, there was a consistent trend of increased association with mortality but appeared similar in all Kt/V subgroups.

In conclusion, patients with lower HD adequacy (Kt/V <1.2 or <1.4), the IDH-mortality association is even stronger. Further studies are needed to examine whether higher Kt/V can protect against higher death risk of niSBP metrics.

