Medical Xpress

Achieving NP predischarge thresholds associated with reduced acute decompensated heart failure mortality, readmission

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Low-strength evidence suggests that achieving brain-type natriuretic peptide (BNP) and pro-brain-type natriuretic peptide (NT-proBNP) predischarge thresholds is associated with a reduced risk for mortality and readmission in patients with acute decompensated heart failure (ADHF). The systematic evidence review is published in *Annals of Internal Medicine*.

Nearly 1 million patients are hospitalized each year with ADHF and more than half of them are readmitted within 6 months with similar symptoms. Discharge decisions are often based on physical examination findings that tend to be imprecise, which may contribute to the high rate of readmissions. Guiding outpatient treatment using BNP and NT-proBNP levels has demonstrated effectiveness in meta-analyses but no corresponding meta-analyses has been done with regard to inpatient ADHF treatment.

Researchers performed a systematic review to examine the effect of using NP thresholds as a discharge criterion on readmission and mortality rates in patients hospitalized for ADHF. They identified 70 full-text articles addressing 10 distinct methods for evaluating readiness for discharge.

While evidence was low-strength, the studies consistently showed a statistically significant reduction in all-cause and cardiovascular

mortality and readmission when predischarge thresholds were achieved. More research is needed to determine definitively if discharge thresholds can be prospectively used to improve clinical outcomes.

More information: Study: http://annals.org/aim/article/doi/10.7326/M16-1468

Editorial: http://annals.org/aim/article/doi/10.7326/M16-2667

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