HealthManagement.org
Promoting Management and Leadership

6-min Walk Test Predicts 30-day Readmission in HF Patients

The 6-minute walk test distance (6MWD), a simple and inexpensive tool, may be effective in predicting 30-day readmission in hospitalised heart failure (HF) patients, according to a new study published in the journal Heart & Lung. The finding warrants further investigation to understand how the 6MWD may predict readmissions, including the cut-off distance most predictive of cardiac events, and guide treatment in hospitalised HF patients.

Many clinical, psychological, social, and health system factors have been previously tested as predictors of 30-day readmission in hospitalised HF patients, but the ability to identify patients at high-risk for early readmissions remains elusive. Assessment of functional capacity – i.e., the ability of an individual to perform activities of daily living – prior to discharge may assist in identifying patients are risk for readmission.

During acute exacerbations of HF, patients demonstrate reduced functional capacity related to their clinical congestion (i.e., fluid volume overload that is observed through signs of jugular vein distention, rales, and oedema). Lingering clinical congestion at discharge in hospitalised HF patients may put them at higher risk for early HF-related readmissions. Dyspnoea on exertion is a hallmark sign of this clinical congestion, and this may best be observed through the assessment of functional capacity using the low-tech six-minute walk test (6MWT) in hospitalised HF patients. The current study aimed to determine if the distance walked during a 6MWT (6MWD) in hospitalised HF patients was predictive of 30-day HF-related readmission.

In this study, 71 hospitalised HF patients with New York Heart Association (NYHA) Class II/III (mean age 52.6 ± 12.3 years, 42.3% female, 73.2% African American) performed 6MWD prior to discharge. Logistic regression was used to determine relationships between 6MWD and 30-day readmission.

Results showed that 30-day readmission occurred in 14 (19.7%) patients. Average 6MWD was 756.4 ± 403.2 feet. Higher 6MWD significantly decreased risk of 30-day readmission, even after adjusting for socio-demographic and clinical characteristics. For each additional 100 feet walked, odds of a 30-day readmission decreased by 16%.

In outpatients with HF, the 6MWT is a well-established measure of functional capacity, and is known to predict mortality and long-term morbidity, particularly in patients with moderate to severe HF. The use of the 6MWT in the inpatient setting, however, remains rare. This is the first known study to report a significant relationship between 6MWD and 30-day HF-related readmissions in hospitalised HF patients, researchers note.

"As hospitals adopt new strategies to prevent HF readmissions, greater understanding of functional capacity as measured by the 6MWD at discharge, associated factors and mechanisms, may help identify patients who

should receive home healthcare, telehealth or more frequently scheduled return visits to the cardiology team. Not only is the 6WMT a simple, feasible, and inexpensive tool that is easily implemented and replicated, but it may also be particularly useful in low-resource settings," the authors write.

Source: Heart & Lung
Image Credit: Pixabay

Published on : Tue, 6 Jun 2017