

SHORT EDITORIAL

Two-Minute Walk Test After an Acute Myocardial Infarction: Feasible and Useful?

Humberto Villacorta¹ 

Universidade Federal Fluminense,¹ Niterói, RJ – Brazil

Short Editorial referring to the article: Feasibility of the Two-Minute Walk Test in Elderly Patients After Acute Myocardial Infarction: A Cross-Sectional Study

Acute myocardial infarction (AMI) is a common, life-threatening condition requiring prompt diagnosis and treatment.^{1,2} Patients who survive an AMI must receive the best evidence-based care to improve survival and reduce recurrent cardiovascular events. Studies have shown patients with AMI and reduced exercise capacity have a worse prognosis than those with preserved functional capacity.³

Exercise capacity can be assessed using cardiopulmonary exercise testing (CPET) or, alternatively, the 6-minute walk test (6MWT). Unlike the CPET, the 6MWT is simple and does not require complex equipment or specialized technical skills. During this simple and safe test, patients are instructed to walk as far as possible along a 30-meter corridor for 6 minutes. The primary measurement is the distance walked in those 6 minutes, recorded in meters.⁴ While the 6MWT is a well-established test, it is time-consuming and can be challenging for severely impaired individuals. The 2-minute walk test (2MWT) may be an alternative for assessing functional capacity in frail or ill patients and has been evaluated in several scenarios (Figure 1).⁵⁻⁷

In the present issue of the International Journal of Cardiovascular Sciences, a cross-sectional study was conducted to assess the feasibility of the 2MWT in older patients after AMI. Fifty-one patients, predominantly male with a mean age of 67 years, participated in the test after hospital discharge. Vital signs were measured before,

immediately after, and 20 minutes after the test. Despite posttest increases in systolic blood pressure and heart rate, all vital signs returned to near pretest levels after rest. The mean distance walked was 352 meters. Authors concluded the 2MWT is a feasible method for assessing submaximal exercise capacity in older patients with post-AMI in a hospital setting.

We commend the authors for their work. The 2MWT has been poorly evaluated in the context of AMI, and this study makes a valuable contribution to the field. However, the study has several limitations. First, the sample size is small, and the study was conducted at a single center. Second, we cannot conclude from this study the 2MWT is equivalent to the 6MWT since there was no direct comparison between the two tests. In addition, the 2MWT has not performed consistently well in other scenarios. For example, in a study of patients with multiple sclerosis, the 2MWT showed a poor correlation with peak VO_2 .⁸ In another study of patients with chronic obstructive pulmonary disease, the 2MWT had a weaker correlation with VO_2 than the 6MWT (Pearson correlation coefficient 0.55 vs 0.65, respectively).⁹ Therefore, these limitations must be considered before substituting one test for the other.

In conclusion, the 6MWT is an established and validated method for assessing exercise capacity after AMI and should be the first choice when CPET is not feasible. In very selected cases, the 2MWT may be useful. However, further studies are needed to explore its efficacy in this setting.

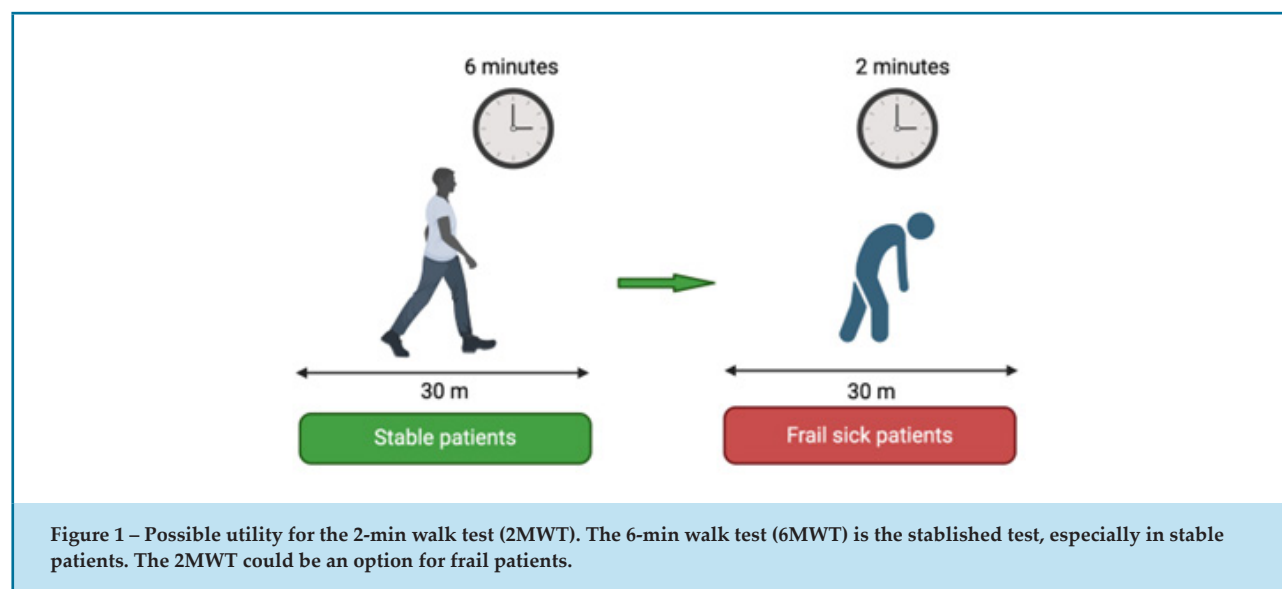
Keywords

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Mailing Address: Humberto Villacorta

Universidade Federal Fluminense. Rua Marques do Paraná, 303. Postal code: 24033-900. Niterói, RJ – Brazil
E-mail: hvillacorta@cardiol.br

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