Six Minute Walk Test: Functional Evaluation and Prognosis in Heart Failure

Editorial

The determination of functional capacity is of fundamental importance in monitoring and defining the prognosis of patients with heart failure (HF) may be the six minute walk test (6MWT) is a possibility. The 6MWT was first described by Balke in 1963 [1], since now applied in various clinical conditions, but still without proper standardization. In 2002, the American Thoracic Society (ATS) has established a guideline for performing the 6MWT [2].

According to the ATS guidelines the 6MWT is a simple test, practical and inexpensive that aims to evaluate the functional capacity in submaximal intensity across the distance that an individual is able to go as soon as possible on a flat, hard surface in a period of six minutes. The 6MWT evaluates the overall condition and integrated responses of pulmonary, cardiovascular and neuromuscular systems and presents direct correlation with the maximal oxygen uptake (VO₂peak), which is described in the literature as the gold standard for determining the aerobic capacity [2].

Cahalin et al. [3], conducted a study demonstrating a significant correlation (r = 0.64, p <0.001) between VO₂peak and the walking distance by patients with HF evaluating how outcome than patients who walked distances of less than 300 meters at higher risk of death. Like outcome it was observed that patients who walked less than 300 meters away had higher risk for hospitalization and death within six months.

Another study that stands out was developed by Ingle et al. [4], evaluated a population patients with HF for 36 months and observed a mortality of 13.3% over the study of direct association with the walking distance in the 6MWT. Individuals who walked closer than 300 meters have evolved with the highest death rate with risk of death of approximately 8% in the first twelve months and approximately 12% in twelve months.

These results are similar to those described by Zielinska et al. [5], in a review study found that in patients with HF who travel a distance of 300 meters have higher overall mortality and increased number of hospitalizations for HF decompensation. The authors indicate that the 6MWT is a safe and simple method to predict mortality and hospitalization.

Despite the distance less than 300 meters represent an important indicator of mortality and morbidity in patients with HF determining the distance scheduled to be walking can be an indicator of the evolution of the patient depending on the specific treatment including cardiac rehabilitation. For determining the distance which must be traveled by the patient to use the specific formula is recommended.

Depending on the information provided and practicality in achieving recommend that the 6MWT is performed in patients with HF for functional evaluation as to determine prognosis.

References