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## Six-minute walk tests and the secret races<sup>☆</sup>



### Prueba de marcha de 6 minutos y las carreras secretas

Dear Editor:

Humans are competitive by nature. They compete for food, for shelter, for well-being. Sometimes they even compete for abstract notions. Yet, are sports a staple of life?

Many of us compete daily in what the Argentine writer Alejandro Dolina called “secret races”<sup>1</sup>: “What you do is, you choose someone in the street who is walking at a sprightly pace, and you try to catch up with them, before they reach a certain point. Running is strictly forbidden”, says Dolina in his rules. Who has never thought “I’m going to overtake the person with the red bag before they reach the corner”? The problems start when the tacit competitor realizes what is up and speeds up, a situation that can result in epic urban contests.

This behavior is inherent to human nature. Possibly with this in mind, the first consensus on the 6-minute walk test stated specifically that the patient should not be accompanied.<sup>2</sup> Surprisingly, the most recent ERS/ATS consensus specifies that the “assessor should not “pace” the patient during the test, but should walk behind such that measures (...) can be recorded without influencing the patient’s movement.”<sup>3</sup>

The standardization of tests should seek to eliminate all bias, and if it cannot be avoided, it should at least be mentioned in the final report. Should the physical characteristics of the assessor who conducted the test be included in the report? Will the distance and speed walked be the same if the patient is followed or not followed by a certain person? Will it be the same if the person doing the following is a burly nurse 2 meters tall and weighing 120 kg or a slender technician weighing 50 kg? And what will happen if the assessor has an unfriendly manner or if their voice does not command respect?

All guidelines, even the most recent, emphasize that the 6-minute walk test should be performed at the patient’s own pace (self-paced), and that the main variable is the distance walked, measured in absolute values. A valid reason for accompanying the patient may be if the patient is thought to be in danger of falling,

in which case the assessor should re-consider whether the patient should perform the test at all.

Another possible reason is the need to carry a bulky oximeter (weight > 1 kg), but in this case, setting a secondary objective (minimum SpO<sub>2</sub>) would skew the outcome of the primary objective (walking distance), a situation that is methodologically inappropriate.

Finally, patients with permanent oxygen therapy might not be able to carry their own source of oxygen, and this should be transported by the assessor. In this case, it would be more reasonable for the oxygen supply to be carried by someone who habitually accompanies the patient on their outings (family, physical therapist, helper). The patient’s pace might not coincide with that of the assessor, and this would weaken the correlation of the test with their activities of daily living. In this case, the accompanying person must be identified, and attempts must be made to ensure that the same person participates in subsequent tests.

## References

1. Dolina A. *El libro del fantasma*. Buenos Aires: Ed. Colihue; 1999.
2. ATS Committee on Proficiency Standards for Clinical Pulmonary Function Laboratories. ATS statement: guidelines for the six-minute walk test. *Am J Respir Crit Care Med*. 2002;166:111–7.
3. Holland AE, Spruit MA, Troosters T, Puhan MA, Pepin V, Saey D, McCormack MC, Carlin BW, Sciruba FC, Pitta F, Wanger J, MacIntyre N, Kaminsky DA, Culver BH, Revill SM, Hernandez NA, Andrianopoulos V, Camillo CA, Mitchell KE, Lee AL, Hill CJ, Singh SJ. An official European Respiratory Society/American Thoracic Society technical standard: field walking tests in chronic respiratory disease. *Eur Respir J*. 2014;44:1428–46.

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