

Letter to the Editor

DOI: 10.22114/ajem.v0i0.387

Besides other Signs, Can a 6-min Walk Test be Applied as a Criterion for Going to the Hospital with a Diagnosis of COVID-19?

Pardis Noormohammadpour^{1,2}, Maryam Abolhasani^{1,2*}

1. Sports Medicine Research Center, Neuroscience Institute, Tehran University of Medical Sciences, Tehran, Iran.

2. Department of Sports and Exercise Medicine, School of Medicine, Tehran University of Medical Sciences, Tehran, Iran.

*Corresponding author: Maryam Abolhasani; Email: dr_m_abolhasani@yahoo.com

Published online: 2020-04-16

Recently the pandemic of Covid-19 challenges countries' medical health services systems. While some patients experience acute and devastating symptoms, others may only have mild myalgia and fever⁽¹⁻³⁾. Due to the high amounts of hospital referrals, some countries' health systems have asked patients to stay at home and go to the hospital when they feel that the symptoms are severe. Some symptoms, such as fever, myalgia, diarrhea, and headache, have been offered as Covid-19 symptoms^(2, 3). However, is there any clinical test that helps patients themselves to detect the severity of symptoms? A six-minute walk test is a clinical test to investigate the function of the cardiorespiratory system. In this test, a physician asks a patient to walk for 6 minutes in a 30-meter walking course⁽⁴⁾. Some studies have shown its relation with short term survival, especially in patients who complete less than 300 meters. Based on the walked distance, results can be used in the two following formats. First, the Vo2 max could be estimated via an equation; second, the distance can be compared at different times⁽⁵⁾. Considering that Covid-19 affects the respiratory tract, it seems that it could affect 6-min walk test results. Due to the particular situation, the health system can ask

people who have mild symptoms to check their 6-min walk test results for several consecutive days besides the other symptoms. If patients' walking distance decreased due to breath shortness at this time, they should go to the hospital. Even if their walking distance is less than 300 meters, maybe they need a chest CT scan. With the application of this approach, we can decrease the load of referrals to the hospitals and also prevent patients with mild symptoms from being contacted to the high load of virus in the hospitals.

ACKNOWLEDGEMENT

None.

AUTHOR CONTRIBUTION

All the authors met the standards of authorship based on the recommendations of the International Committee of Medical Journal Editors.

CONFLICT OF INTEREST

None declared.

FUNDING

None declared.

REFERENCES

1. Huang C, Wang Y, Li X, Ren L, Zhao J, Hu Y, et al. Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. *Lancet*. 2020;395(10223):497-506.
2. World Health Organization. Clinical management of severe acute respiratory infection when novel coronavirus (nCoV) infection is suspected. [Available via the link: file:///C:/Users/HP/Downloads/WHO-2019-nCoV-clinical-2020.4-eng.pdf]. Last accessed on April 16, 2020.
3. Guo YR, Cao QD, Hong ZS, Tan YY, Chen SD, Jin HJ, et al. The origin, transmission and clinical therapies on coronavirus disease 2019 (COVID-19) outbreak—an update on the status. *Mil Med Res*. 2020;7:11.
4. 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.
5. Dumke CL. Health-Related Physical Fitness Testing and Interpretation. In: Deborah Riebe, editors. *ACSM's Guidelines for exercise testing and prescription*. 10th ed. Wolters Kluwer: American college of sports medicine; 2018. P: 77-8.