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Letter to the Editor

Cardiocentro Ernesto Che Guevara Santa Clara Cuba

Post-COVID-19 Arterial Hypertension in Older Women: A High-Risk Sequela

Hipertensión arterial post-COVID 19 en mujeres de edad avanzada: una secuela de alto riesgo

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To the Editor:

It has been suggested that the disciplined adherence to operational procedures, systematic research, and the leveraging of experience from other medical or scientific centers allowed for a reduction in the number of severe, critical, and hospitalized patients compared to COVID-19 patient data in Cuba and other countries[1]. Nevertheless, we deem it pertinent to highlight the need to continue these arduous efforts in cooperation, follow-up, control, and evaluation during the post-pandemic period, especially among high-risk populations.

Considering the above, the post-acute sequelae of COVID-19 infection are heterogeneous. Cardiovascular complications include cardiopulmonary syndromes, myocardial infarction, stroke, among others[2].

Matsumoto *et al.*[3], consider that the pathophysiological mechanisms of prolonged COVID are still unknown. This is due to the fact that SARS-CoV-2 infection can generate severe health complications in general, referring not only to the acute phase of the disease but also to the chronic phase, including, without exception, the cardiovascular system[4].

Furthermore, it is suggested that, in the post-acute period, COVID-19 survivors may develop hypertension[5]. Similarly, factors associated with a higher prevalence of these symptoms were advanced age, a higher body mass index, and female sex[6]. This highlights the possible influence of advanced age and female sex on post-COVID-19 arterial hypertension.

Subsequently, another study identified that, 8 months after infection, the prevalence of prolonged COVID symptoms was 2.25 for women and 1.5 for men. Likewise, female sex was associated with three or more symptoms[7]. Moreover, a meta-analysis that included 20 studies for a total of 13340 patients (women: 6213 [47.6%]) found that female sex was significantly related to respiratory symptoms, mental health symptoms, and fatigue associated with prolonged COVID[8].

However, Xie *et al.*[9], concluded that the risk of long-term cardiovascular outcomes following COVID-19 existed regardless of sex. Similarly, an upregulation of the striated muscle-specific Ser/Thr-kinase (SPEG) has been documented as a specific protective mechanism for women against COVID-19-in-

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duced cardiac damage[10]. Therefore, a certain discrepancy exists among studies regarding post-COVID hypertension in women.

Considering the above, we recommend placing greater emphasis and conducting increased follow-up on the prevalence of arterial hypertension in older adults and women during this post-pandemic period. Similarly, public health policies should promote strategies that involve the control and intervention of various cardiovascular risk predictors, such as physical activity, dietary habits, physical fitness, and frailty, among others.

CONFLICTS OF INTEREST

None.

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