


Post-COVID Erectile Dysfunction: The Exercise May Be a Good Considered Complementary Choice

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Dear Editor,

Every day, emerging research uncovers COVID-19's extensive effects on many organs across the body. One of these side effects has been identified as erectile dysfunction (ED; Sevim et al., 2022).

Men with COVID-19 were 3.3 times as likely to experience ED (Katz et al., 2022). Endothelial damage/dysfunction has been proposed as the fundamental pathophysiological mechanism of post-COVID-induced ED (Sevim et al., 2022). Endothelial damage/dysfunction results from systemic endotheliitis, cellular death, increased inflammatory cytokines, residual activation of immune system, continuous stimulation of platelet activation and leukocyte adhesion, and decreased nitric oxide (NO) bioavailability (Ambrosino et al., 2021). It has been reported that such causes, in addition to other factors such as the severity of the COVID-19 condition, dread of death, and the length of the isolation period, produce anxiety and sadness, increasing the risk of ED (Sevim et al., 2022).

Inhibitors of phosphodiesterase type 5 (pharmacological drugs) are commonly used as a first-line treatment for ED. Exercise, a therapeutic supplementary technique, is a first-line treatment option (Ismail & Abdelghany, 2022). Exercise, which has been shown to reduce cardiovascular risk, improve clinical respiratory and functional complications, improve life quality, decrease psychological disturbances, improve pain perception, enhance immunity, and decrease systemic pro-inflammatory markers, may target endothelial damage/dysfunction following the COVID-19's acute phase (Ambrosino et al., 2021).

Regular exercise for ED can take many different forms (continuous, interval, moderate-intensity, high-intensity, or combinations) with many benefits such as relaxation of blood vessel walls (due to local production of hormonal/biochemical substances), body warming effects, and local creation of specific serum chemicals (lactic acid and NO; Ismail & Abdelghany, 2022).

Future studies exploring the addition of exercise to medications for ED induced by COVID-19 must be considered, particularly given the good reported impact

of exercise on post-COVID sequelae. Finally, it must be taken into consideration that exercise description for men with COVID-induced ED necessitates a thorough assessment of residual symptoms, clinical and cardiovascular risk profile, as well as physical and potential limitations.

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