

Effects of COVID-19 lockdown on physical activity in coronary patients on a phase III cardiac rehabilitation program

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Introduction: At the start of the COVID-19 pandemic, all over Europe imposed population lockdowns. In our country, the government approved a nationwide confinement from March 14 to April 12, which restricted the movement of people to a very specific schedule. The lockdown was then relaxed, but remained in place until June 7. Cardiac rehabilitation (CR) is a class I level A recommendation with clinical benefits that are now well documented. The COVID-19 lockdown made it particularly difficult to achieve the goals of CR, that is, the maintenance of physical exercise and the control of cardiovascular risk factors (CVRF) in cardiac patients. Little is known about its effects on phase III of CR program (CRP).

Purpose: To assess the effect of the COVID-19 pandemic lockdown on physical activity and on the adherence to a cardio-healthy lifestyle in post-acute coronary syndrome (ACS) patients.

Methods: A nested cross-sectional substudy of all patients included in a randomised clinical trial before the lockdown by means of a telephone survey during the month of May. We are conducting a randomized clinical trial to assess the efficacy of a phase III CRP, based on counselling in the maintenance of physical exercise (time of physical exercise per week) and on reinforcing the control of CVRF for patients with ACS, once the hospital-supervised physical exercise program of a phase II CRP had been completed.

Results: Thirty-two patients were included. Mean age was 60.3 (SD 10.1) and 81.3% were men. Related to baseline, no statistically significant differences were observed between groups. One patient (3.1%) had symptoms of COVID-19. The lockdown altered the dynamics of physical exercise in 21 patients (65.6%), 20 of whom (95.2%) reported taking fewer minutes of exercise per week. After the end of the lockdown period and outdoor physical exercise was allowed once again, 11 patients (55.0%) in the control group and 9 patients (75.0%) in the intervention group found it easy to restart physical exercise. With regard to nutrition, most patients (78.1%) followed the recommendations to eat a Mediterranean diet. Five (15.6%) modified their alcohol consumption, and three smokers (33.3%) modified their tobacco consumption. When asked about their mood during the lockdown, 22 (68.8%) reported feeling well. Finally, 96.9% of patients adhered to medical treatment.

Conclusions: The lockdown reduced the level of physical activity but more intervention group patients resumed recommended physical activity. The COVID-19 pandemic is likely to result in care disruptions of varying degrees in the near future. To counteract the damaging effects of giving up physical exercise, health professionals should stay in contact with patients to motivate them to take physical exercise and encourage them to perform indoor exercise-based personalized programs to keep up the amount of exercise they take each week.