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Spotlight on Special Topics

FOLLOW-UP OF HOSPITALIZED COVID-19 SURVIVORS: ASSESSMENT OF SHORT AND LONG-TERM CARDIOVASCULAR SEQUELAE AFTER SARS-COV-2 INFECTION

Poster Contributions

For exact presentation time, refer to the online ACC.22 Program Planner at <https://www.abstractsonline.com/pp8/#!/10461>

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Background: Cardiovascular sequelae in COVID-19 survivors remain largely unclear and can potentially go unrecognized. Reports on follow-up focused on cardiovascular evaluation after hospital discharge are currently scarce. Aim of this prospective study was to assess cardiovascular sequelae in previously hospitalized COVID-19 survivors.

Methods: The study was conducted at "Sapienza" University of Rome - Policlinico "Umberto I". After 2 months from discharge, n=230 COVID-19 survivors underwent a follow-up visit at a dedicated "post-COVID Outpatient Clinic". A cardiovascular evaluation including electrocardiogram (ECG), Troponin and echocardiography was performed. Further tests were requested when clinically indicated. Medical history, symptoms, arterial-blood gas, blood tests, chest computed tomography, and treatment of both in-hospital and follow-up evaluation were recorded. A one-year telephone follow-up was performed.

Results: A total of 36 (16%) COVID-19 survivors showed persistence or delayed onset of cardiovascular disease at two-months follow-up visit. Persistent condition was recorded in 62% of survivors who experienced an in-hospital cardiovascular disease. Delayed cardiovascular involvement included: myocarditis, pericarditis, ventricular dysfunction, new onset of systemic hypertension and arrhythmias. At one-year telephone follow-up, 105 (45%) survivors reported persistent symptoms, with dyspnoea and fatigue being the most frequent. 60% of survivors showed persistent chest CT abnormalities and among those 28 % complained of persistent cardiopulmonary symptoms at long term follow-up.

Conclusion: Our preliminary data showed persistent or delayed onset of cardiovascular involvement (16%) at short-term follow-up and persistent symptoms (45%) at long-term follow-up. These findings suggest the need for monitoring COVID-19 survivors.