

Title: Clinical Outcomes of COVID-19 Recovered Patients

Authors: Jessica Barbara, Jessica Gatt, Rachel Anne Xuereb, Nick Tabone Adami, Jessica Darmanin, Renee Erasmi, Robert G. Xuereb, Christopher Barbara, Stephen Fava, Caroline J. Magri

Background/Introduction: The novel Coronavirus disease 2019 (COVID-19), the unexpected pandemic, is an illness caused due to SARS-CoV-2. It resulted in significant concern amongst people globally in view of its multi-organ involvement and especially high fatality rate, with elderly patients, immune deficient subjects as well as those having underlying medical conditions affecting the lungs, the kidneys and the heart being the ones most severely affected.

Purpose: To assess the clinical outcome at medium-term follow-up in subjects previously infected with COVID-19.

Methods: A cross-sectional survey was conducted in subjects who were diagnosed with COVID-19 following nasopharyngeal swabbing. All participants were submitted to a standardized questionnaire regarding past medical history, blood group, drug history, smoking history and alcohol intake. This was done via telephone call. Furthermore, subjects were submitted to a questionnaire to assess for persistent symptomatology. Baseline blood investigations were also taken for participants who wished to do so; these included fasting plasma glucose, fasting lipid profile, glycated haemoglobin and NT-proBNP levels.

Results: In total, 2,650 subjects accepted to participate in this survey. The median age of the participants was 44 years (IQR:31-55 years). Of these, 48.6% were males while 51.2% were females. Five per cent of the study population were hospitalised in view of severe illness and of these 0.7% were intubated. Smokers comprised 16.9% of the population and 10.3% were ex-smokers. 17% suffered from hypertension, 10.7% had hyperlipidaemia, ischaemic heart disease was present in 2.3%, heart failure in 0.6%, obesity in 18%, chronic kidney disease in 0.2%, chronic respiratory disease in 6.9% and type 2 diabetes mellitus in 7.3%. At a median follow-up of 142 days (IQR: 128-161 days), 22% of the participants claimed that they were feeling worse than they felt before COVID-19 while 77% claimed that their general condition was same to previous, 22.5% reported shortness of breath while 8.4% reported chest pain, fatigue was present in 25.6%, headaches in 19.6% and myalgias in 14.7%. Abnormal taste of food and anosmia were reported in 52.9% and 55.2% respectively. On analysis of blood investigations, it was noted that hospitalised patients had significantly higher ALP and troponin levels at follow-up while subjects who required intubation had significantly higher troponin levels.

Conclusion(s): At medium-term, approximately one-fifth of subjects were still significantly debilitated following COVID-19. Furthermore, elevated troponin levels at follow-up seem to indicate more severe disease. This merits further investigation.